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OM protein - protein search, using sw model

Run on: April 22, 2005, 16:19:29 ; Search time 29.9558 Seconds  
(without alignments)  
844.779 Million cell updates/sec

Title: US-09-889-609B-8  
Perfect score: 1740  
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Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0  
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Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1582.5	90.9	340	4	US-09-789-300A-2
2	606	34.8	332	4	US-09-543-681A-4645
3	573	32.9	328	4	US-09-328-352-4536
4	543	31.2	374	4	US-09-252-991A-31294
5	480	27.6	334	4	US-09-489-039A-14107
6	457.5	26.3	524	4	US-09-328-352-4536
7	450.5	25.9	411	4	US-09-328-352-4536
8	434	24.9	405	4	US-09-302-540-12639
9	418	24.0	525	4	US-09-543-681A-4364
10	406.5	23.4	677	4	US-09-252-991A-22442
11	379	21.8	521	4	US-09-489-039A-8050
12	365	21.0	424	3	US-09-134-001C-3876
13	365	21.0	424	4	US-09-710-279-1046
14	359.5	20.7	441	1	US-08-403-866-10
15	355	20.4	518	4	US-09-404-236-3648
16	352	20.2	507	4	US-09-424-978B-34
17	347.5	20.0	520	4	US-09-328-352-4536
18	342.5	19.7	421	4	US-09-107-433-2928
19	336.5	19.3	416	4	US-09-583-110-3878
20	303	17.4	436	3	US-08-669-378-2
21	303	17.4	436	3	US-08-669-378-12
22	302	17.4	436	3	US-08-669-378-4
23	302	17.4	436	3	US-08-669-378-6
24	302	17.4	436	3	US-08-669-378-10
25	300	17.2	436	3	US-08-669-378-8
26	296.5	17.0	378	4	US-09-789-300A-4
27	278.5	16.0	329	4	US-09-843-297-2

28	261.5	15.0	347	4	US-09-949-016-10697	Sequence 10697, A
29	254.5	14.6	325	3	US-09-088-435-1	Sequence 1, Appli
30	253	14.5	331	4	US-09-252-991A-29393	Sequence 29393, A
31	252.5	14.5	328	4	US-09-949-016-6763	Sequence 6763, Ap
32	242.5	13.9	392	4	US-09-424-978B-29	Sequence 29, Appl
33	229	13.2	367	3	US-09-134-001C-4168	Sequence 4168, Ap
34	219.5	12.6	373	4	US-09-248-796A-18227	Sequence 18227, A
35	205.5	11.8	308	4	US-09-583-110-4369	Sequence 4369, Ap
36	205.5	11.8	317	4	US-09-107-433-4532	Sequence 4532, Ap
37	204.5	11.8	193	4	US-09-248-796A-17694	Sequence 17694, A
38	203	11.7	387	4	US-09-248-796A-18228	Sequence 18228, A
39	196	11.3	311	4	US-09-962-357-5	Sequence 5, Appli
40	191	11.0	225	4	US-09-134-000C-3983	Sequence 3983, Ap
41	185.5	10.7	550	4	US-09-538-092-1075	Sequence 1075, Ap
42	185.5	10.7	551	1	US-08-120-960-2	Sequence 2, Appli
43	185.5	10.7	551	3	US-09-347-878-9	Sequence 9, Appli
44	184	10.6	311	4	US-09-252-991A-25027	Sequence 25027, A
45	182.5	10.5	308	4	US-09-107-532A-3925	Sequence 3925, Ap

ALIGNMENTS

RESULT 1  
US-09-789-300A-2  
; Sequence 2, Application US/09789300A  
; Patent No. 6458576  
; GENERAL INFORMATION:  
; APPLICANT: Meyers, Rachel  
; APPLICANT: Rudolph-Owen, Laura A.  
; TITLE OF INVENTION: 22406, A No. 6458576el Human Pyridoxal-Phosphate  
; TITLE OF INVENTION: Dependent Enzyme Family Member and Uses Therefore  
; FILE REFERENCE: 35800/208926  
; CURRENT APPLICATION NUMBER: US/09/789,300A  
; CURRENT FILING DATE: 2001-02-20  
; PRIOR APPLICATION NUMBER: US 60/183,208  
; PRIOR FILING DATE: 2000-02-17  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 2  
; LENGTH: 340  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-789-300A-2

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Best Local Similarity	89.7%;	Pred. No. 1.6e-165;		
Matches	305;	Conservative 19;	Mismatches 15;	Indels 1; Gaps 1;
QY	1	MCAQYICISPADVEKAHINIQDSIHLPVLTSSILNQAGNLFKCELFKTSFKIRGA	60	
Db	1	MCAQYICISPADVEKAHINIQDSIHLPVLTSSILNQAGNLFKCELFKTSFKIRGA	60	
QY	61	LNAIIRGLIPDTEPKKAVVTHSSGNHQAITYAAKLEGIPAVIVVQTPAPNCKKLAIOA	120	
Db	61	LNAIIRGLIPDTEPKKAVVTHSSGNHQAITYAAKLEGIPAVIVVQTPAPNCKKLAIOA	120	
QY	121	YGASIVVCPSPDESREKVTORIMQETEGILVHPNQPAVIAGQGTIALEVLNQPVLVDAL	180	
Db	121	YGASIVVCPSPDESREKVTORIMQETEGILVHPNQPAVIAGQGTIALEVLNQPVLVDAL	180	
QY	181	VVPVGGGGVAGIATITKALKPSVKVYAAEPSNADDCYQSKLGELTPNLPHTIADGV	240	
Db	181	VVPVGGGGVAGIATITKALKPSVKVYAAEPSNADDCYQSKLGELTPNLPHTIADGV	240	
QY	241	KSGIGLNTWPIIRDLVDDVFTVTEDEIKATQLVWERMKLLIIEPTAGVAAVLSQHFQT	300	
Db	241	KSGIGLNTWPIIRDLVDDVFTVTEDEIKATQLVWERMKLLIIEPTAGVAAVLSQHFQT	300	
QY	301	VSPVKNVICVLSGGNVDLT-SLNWVQGAERPAFYQTVSV	339	
Db	301	VSPVKNVICVLSGGNVDLT-SLNWVQGAERPAFYQTVSV	340	

Query Match 32.9%; Score 573; DB 4; Length 328;  
Best Local Similarity 40.8%; Pred. No. 2,7e-54;  
Matches 129; Conservative 62; Mismatches 113; Indels 12; Gaps 5;  
QY 8 SFADVEXAHINIQDSIHLPVLTSSILNQIAGNLPFKCELPQKGTGSKIRGALNAIRGL 67

[illegible]

; NAME/KEY: UNSURE

Qy 246 · LNTWPIIRDLDVDDFTVTDEDEIKYATQLVWGRMKLLIETAGVALAAVLISOHQFQTVSPV 305

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; ORGANISM: pseudomonas aeruginosa
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; FEATURE:
; NAME/KEY: UNSURE
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Db 246 ELTTQIAKHFVDDIVVVTEDMIEBAIALLLNIEKTVCBGAGATGIAAIMSR-----PDL 299
Qy 306 ---KNVCIVLSGGND 318
Db 300 FLGHKGVVLSGGNID 315

RESULT 8
US-09-902-540-12639
; Sequence 12639, Application US/09902540
; Patent No. 6833447
; GENERAL INFORMATION:
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Wisegand, Roger C.
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
; FILE REFERENCE: 38-10(15849)B
; CURRENT APPLICATION NUMBER: US/09/902,540
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: 60/217,883
; PRIOR FILING DATE: 2000-07-10
; NUMBER OF SEQ ID NOS: 16825
; SEQ ID NO 12639
; LENGTH: 405
; TYPE: PRT
; ORGANISM: Myxococcus xanthus
US-09-902-540-12639

Query Match 24.9%; Score 434; DB 4; Length 405;
Best Local Similarity 32.8%; Pred. No. 8.1e-39;
Matches 105; Conservative 64; Mismatches 143; Indels 8; Gaps 5;

Qy 7 ISPADVEKAHINIODSIHLTPVLTSSILNQ-IAGRNLPFKCELFQKTSFKIRGALNAIR 65
Db 2 VTLEDIOAARERLNSARTRPCQSDYYTTECAAVFFKLENLQRTGAFKRGALNKL 61
Qy 66 GLIPDTPPEKPKAVVTHSSNGHQALTYAAKLEGIPAYIVVQTPAPNCK-KLAIQAYGAS 124
Db 62 TL---TEDERRRGVIAASAGNAGQAVHARRLGVSAIVMPERTPLIKVSRTRDDYGAR 118
Qy 125 IVYCDPSDESREKVTQIMQETEGILVHPNOEPAVIAQGTIALLEVNLQVPLVDALVVPV 184
Db 119 VLKGTNYDEAYAEALRIQAEADVTFHPFNDARHVIAGOGTIGLELLEQCPDLEVLVPI 178
Qy 185 GGGGWAGIAITIKALKPSVKVYAAEPSNADDCYQSKLKGELTPNLHPPTIADGVK-SS 243
Db 179 GGGGLSGIACALKETPRDVRVGVQAEETASMKASVEAGERVLLAAAGTTIADGIAVKR 238
Qy 244 IGLNTWPIIRDLDVDDVFTVTEDEIKYATQLVWGRMKLLIEPTAGVALAAVLSQHFQTVSP 303
Db 239 VGDLTPEMVQKYVDEVVAVDEEBIAAAILTLLEQKSVVEGAGAVGLAALLSG--DVPAA 296
Qy 304 EVKNVCIVLSGGNDVLTSLN 323
Db 297 RGRRTAILLSGGNIDMNVIS 316

RESULT 9
US-09-543-681A-4364
; Sequence 4364, Application US/09543681A
; Patent No. 6605709
; GENERAL INFORMATION:
; APPLICANT: GARY BRETON
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABILIS
; TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.1002-001
; CURRENT APPLICATION NUMBER: US/09/543,681A
; CURRENT FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/128,706
; PRIOR FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 8344
; SEQ ID NO 4364
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; LENGTH: 525
; TYPE: PRT
; ORGANISM: Proteus mirabilis
US-09-543-681A-4364

Query Match 24.0%; Score 418; DB 4; Length 525;
Best Local Similarity 34.3%; Pred. No. 7.3e-37;
Matches 113; Conservative 66; Mismatches 130; Indels 20; Gaps 9;

Qy 8 SPADVEKAHIN--IODSIHLTPVLTSSILNQIAGRNLFPKCELFQKTSFKIRGALNAIR 65
Db 13 SSAEYLKAALSADPYEAAVVTPLQEMAKISQRLNTILVKREDRQPVHSPKLRGAYNMIA 72
Qy 66 GLIPDTPPEKPKAVVTHSSNGHQALTYAAKLEGIPAYIVVQTPAPNCKKLAIQAYGA-S 124
Db 73 GL---TPEQKAGGVVTASAGNHAQGVALSANRGMVKALIVMPIATADIKVDVAVRQFGEA 129
Qy 125 IVYCDPSDESREKVTQIMQETEGILVHPNOEPAVIAQGTIALLEVNLQVPLVDALVVPV 184
Db 130 LLYGANFDEAKAKAI-ALAKEMGYTFVPPPDHFAVIAGQATLAWELLQQDVHLDRIFVPV 188
Qy 185 GGGGWAGIAITIKALKPSVKVYAAEPSNADDCYQSKLKGELTPNLHPPE-----TIADG 239
Db 189 GGGGLIAGVAVLTKQLMPEIKIIGVEAEDA-ACLKAALFAG-----HPVELPRVGLFAEG 242
Qy 240 VK-SSIGLNTWPIIRDLDVDDVFTVTEDEIKYATQLVWGRMKLLIEPTAGVALAAVLSQHF 298
Db 243 VAVKRIGDETFLRCQKYVDDVITVDSDAICAAVKDLFEDVRAIAEPSGALALAG-LKKYV 301
Qy 299 QTVSPEVKNCVILSGGNDVLTSLNWWGQ 327
Db 302 EEHQIKGERLAHVLSGANVNFHGLRVSE 330

RESULT 10
US-09-252-991A-22442
; Sequence 22442, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: ASRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 22442
; LENGTH: 677
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-22442

Query Match 23.4%; Score 406.5; DB 4; Length 677;
Best Local Similarity 33.0%; Pred. No. 2.1e-35;
Matches 109; Conservative 62; Mismatches 132; Indels 27; Gaps 9;

Qy 26 TPVLTSSILNQIAGRNLFPKCELFQKTSFKIRGALNAIRLIPDTPPEKPKAVVTHSSG 85
Db 194 TPLQVAPQLSQRLLGNRLKREDLQPVFSFKIRGAYTRVARL---SDEQKARGVITASAG 250
Qy 86 NHGOALTVAALKLEGIPAYIVVQTPAPNCKKLAIQAYGA-SIVYCDPSDESREKVTQIRIMQ 144
Db 251 NHAQGLALAAQRLGKRAVIVMPRTTPELKVGVGLARGGELLHGDAFPDAAHALAQ--LA 308
Qy 145 ETEGI-LVHPNOEPAVIAQGTIALLEVNLQ-VPLVDALVVPVGGGWAGIAITIKALKP 202
Db 309 EREGMTFFVPPYDDPDVIAQGTIVAMEILRQHSRLDAIFVPVGGSLIAGIAIYVKKLRP 368
Qy 203 SVKYAAEPSNADDCYQSKLKGELTPNLHPPTIADGVK-SSIGLNTWPIIRDLDVDDVFT 261
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Db 369 DIRVIGEPEDS-NLQALAAAGSERVVLGVGLFADGVAVQAQACNFVCKDHVDEVIT 427  
QY 262 VTDEIKYATQVLWGRMKLLIEPTAGVALAAVLISQHFQTVSPVKNVCIVLSGNGNDLTS 321  
Db 428 VGSDEICAAIKDIYDDRSITEPAGALAVAGI-KKYVARERTEGQTLVAIDSGANINFR 486  
QY 322 LNWVGQ-----AERPAPYQ 335  
Db 487 LRHVAERAELEQREAIIVTVAERPGSFK 516

## RESULT 11

US-09-489-039A-8050  
; Sequence 8050, Application US/09489039A  
; Patent No. 6610836  
; GENERAL INFORMATION:  
; APPLICANT: Gary Breton et. al  
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA  
; FILE REFERENCE: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS  
; CURRENT APPLICATION NUMBER: US/09/489,039A  
; PRIOR FILING DATE: 2000-01-27  
; PRIOR FILING DATE: 1999-01-29  
; NUMBER OF SEQ ID NOS: 14342  
; SEQ ID NO 8050  
; LENGTH: 521  
; TYPE: PRT  
; ORGANISM: Klebsiella pneumoniae  
US-09-489-039A-8050

Query Match 21.0%; Score 379; DB 4; Length 521;  
Best Local Similarity 32.0%; Pred. No. 1.4e-32;  
Matches 101; Conservative 67; Mismatches 130; Indels 18; Gaps 8;  
QY 19 IQDSIHLTPVLTSILNQIAGRNLFKCELFQKTSFKIRGALNAIRGLIPDTPPEKPKA 78  
Db 32 VYEAQKTPLOKMDKLSRLDNVILVKREDRQPVHFKLRGAYAMMSL---TAEQKSHG 88  
QY 79 VVTHSSGNHGQALTYAAKLEGIPAYIVPOTAPNCKKLAIQAYGASIVYCDPS-DESREX 137  
Db 89 VITASAGNAAGQVAFSASRLGVKALIVPVATADIKVDAVRGEGEVLLHGANFDEAKAR 148  
QY 138 VTQIMQETEGILVHPNQEPAVIAGQGTIALEVLNQVPLDALVVPVGGGVMVAGIATI 197  
Db 149 AIB-LAQOQGFVWPPFHEWVIAGQGTIALELLQDAHDIVFVVPVGGGGLAAGVAVLI 207  
QY 198 KALKPSVKVYAAPSNADD--CYQSKLKGELTFLNHPPETIADGVK-SSIGLNTWPIIRD 254  
Db 208 KQLMPOIKVIAVE---AEDSACLKAALDAGHPVDLPVGLFARGVAVKRGIDETFLCQE 264  
QY 255 LVDDVFTVTEDEIKYATQVLWGRMKLLIEPTAGVALAAV---LSQHFQTVSPVKNVCIV 311  
Db 265 YLDDIITVSDALCAWKOLFEDVRAVAPSGALALAGMKKYIAQH-----NIRGERLAHI 320  
QY 312 LSGGNVDTLSLNVGQ 327  
Db 321 LSGANVNFHCLRVSE 336

## RESULT 12

US-09-134-001C-3876  
; Sequence 3876, Application US/09134001C  
; Patent No. 6380370  
; GENERAL INFORMATION:  
; APPLICANT: Lynn Doucette-Stamm et al  
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS  
; FILE REFERENCE: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS  
; CURRENT APPLICATION NUMBER: US/09/134,001C  
; CURRENT FILING DATE: 1998-08-13  
; PRIOR APPLICATION NUMBER: US 60/064,964

; PRIOR FILING DATE: 1997-11-08  
; PRIOR APPLICATION NUMBER: US 60/055,779  
; NUMBER OF SEQ ID NOS: 5674  
; SEQ ID NO 3876  
; LENGTH: 424  
; TYPE: PRT  
; ORGANISM: Staphylococcus epidermidis  
US-09-134-001C-3876

Query Match 21.0%; Score 365; DB 3; Length 424;  
Best Local Similarity 29.8%; Pred. No. 3.5e-31;  
Matches 97; Conservative 60; Mismatches 152; Indels 16; Gaps 7;  
QY 7 ISFADVEKAHINIQDSIHLTPVLTSILNQIAGRNLFKCELFQKTSFKIRGALNAIRG 66  
Db 9 VSTKIDIEAYLRKLNIVKETPLQFDHYLSQKYNVCNVLKREDLQWVRSFKLRGAYNAISV 68  
QY 67 LIPDTPPEKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVPOTAPNCKKLAIQAYGAS-- 124  
Db 69 L---SNEEKNGITCASAGNHAQGVAYTAKKLNKAVIFMPVTTTPROKINQVRFPGDSNV 125  
QY 125 --IVYCDPSDESREKVTQRIQETEGILVHPNQEPAVIAGQGTIALEVLNQV---PLVD 178  
Db 126 EIVLIGDTFDHCLAQALNLYTKQHMM-FIDPFNNVTIAGQGTIALEILNQAEKEDTFD 184  
QY 179 ALVVPVGGGVMVAGIATIKALKPSVKVYAAEPSNADDCCYQSKLKGELTFLNHPPETIAD 238  
Db 185 YVFAAIGGGGLISGVSTYFKAHSPHTKIIGVEPTGASSMYQSVVINHSIVTLENIDKFVD 244  
QY 239 GVK-SSIGLNTWPIIRDVDDVFTVTEDEIKYATQVLWGRMKLLIEPTAGVALAAVLSQH 297  
Db 245 GASVARVGDITFDIAKDKVDVYQVDEGAVCSTILDMYSKQAIVAEP-AGALSVSALAEQ 303  
QY 298 FQTVSPVKNVCIVLSGNGVDLTSL 322  
Db 304 KKQI---ENKTIIVCSGGNNDINRM 326

## RESULT 13

US-09-710-279-1046  
; Sequence 1046, Application US/09710279  
; Patent No. 6703492  
; GENERAL INFORMATION:  
; APPLICANT: KIMMERLY, WILLIAM JOHN  
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS  
; FILE REFERENCE: PU3480US  
; CURRENT APPLICATION NUMBER: US/09/710,279  
; CURRENT FILING DATE: 2000-11-09  
; PRIOR APPLICATION NUMBER: 60/164,258  
; PRIOR FILING DATE: 1999-11-09  
; NUMBER OF SEQ ID NOS: 4472  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 1046  
; LENGTH: 424  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: synthetic  
; OTHER INFORMATION: amino acid sequence  
US-09-710-279-1046

Query Match 21.0%; Score 365; DB 4; Length 424;  
Best Local Similarity 29.8%; Pred. No. 3.5e-31;  
Matches 97; Conservative 60; Mismatches 152; Indels 16; Gaps 7;  
QY 7 ISFADVEKAHINIQDSIHLTPVLTSILNQIAGRNLFKCELFQKTSFKIRGALNAIRG 66  
Db 9 VSTKIDIEAYLRKLNIVKETPLQFDHYLSQKYNVCNVLKREDLQWVRSFKLRGAYNAISV 68  
QY 67 LIPDTPPEKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVPOTAPNCKKLAIQAYGAS-- 124  
Db 69 L---SNEEKNGITCASAGNHAQGVAYTAKKLNKAVIFMPVTTTPROKINQVRFPGDSNV 125



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OM protein - protein search, using sw model

Run on: April 22, 2005, 16:23:43 ; Search time 88.3697 Seconds  
(without alignments)  
1276.639 Million cell updates/sec

Title: US-09-889-609B-8  
Perfect score: 1740  
Sequence: 1 MCAQYCISFADVEKAHINIO.....TSLNWVGQARPAQYQTVSV 339

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Gapop 10.0 , Gapext 0.5

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Total number of hits satisfying chosen parameters: 1424015

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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4:	/cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*	5:	/cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*	6:	/cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
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16:	/cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*	17:	/cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*	18:	/cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19:	/cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*	20:	/cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*		

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1582.5	90.9	340	9	US-09-789-300A-2
2	1582.5	90.9	340	14	US-10-164-966-2
3	1582.5	90.9	340	15	US-10-240-800-2
4	1578.5	90.7	340	14	US-10-240-466-2
5	988	56.8	228	15	US-10-264-237-2089
6	756.5	43.5	339	16	US-10-437-963-106995
7	743.5	42.7	379	15	US-10-425-114-49567
8	640.5	36.8	280	15	US-10-425-114-62761
9	577	33.2	247	15	US-10-424-599-155063
10	499.5	28.7	252	16	US-10-767-701-43071
11	485.5	27.9	409	14	US-10-156-761-10839
12	476	27.4	329	15	US-10-413-943-33
13	392.5	22.6	576	15	US-10-413-943-29

14	384	22.1	514	15	US-10-413-943-31	Sequence 31, Appl
15	380	21.8	602	15	US-10-424-599-266101	Sequence 266101,
16	378	21.7	514	15	US-10-413-943-32	Sequence 32, Appl
17	375	21.6	608	15	US-10-425-114-38570	Sequence 38570, A
18	374.5	21.5	499	15	US-10-425-114-39197	Sequence 39197, A
19	373.5	21.5	511	15	US-10-425-114-55647	Sequence 55647, A
20	371.5	21.4	595	15	US-10-413-943-27	Sequence 27, Appl
21	371	21.3	502	15	US-10-413-943-8	Sequence 8, Appl
22	371	21.3	532	15	US-10-413-943-12	Sequence 12, Appl
23	371	21.3	539	15	US-10-413-943-10	Sequence 10, Appl
24	371	21.3	545	15	US-10-413-943-20	Sequence 20, Appl
25	371	21.3	592	15	US-10-413-943-2	Sequence 2, Appl
26	371	21.3	592	15	US-10-413-943-4	Sequence 4, Appl
27	371	21.3	592	15	US-10-413-943-64	Sequence 64, Appl
28	371	21.3	592	15	US-10-413-943-67	Sequence 67, Appl
29	371	21.3	609	15	US-10-413-943-6	Sequence 6, Appl
30	371	21.3	609	15	US-10-413-943-63	Sequence 63, Appl
31	371	21.3	751	16	US-10-437-963-138876	Sequence 138876,
32	371	21.3	751	15	US-10-413-943-59	Sequence 59, Appl
33	358	20.6	590	15	US-10-413-943-26	Sequence 26, Appl
34	357.5	20.5	310	9	US-09-738-626-4591	Sequence 4591, Ap
35	336.5	19.3	416	17	US-10-472-928-750	Sequence 750, App
36	307	17.6	436	9	US-09-738-626-5828	Sequence 5828, Ap
37	296.5	17.0	378	9	US-09-789-300A-4	Sequence 4, Appl
38	296.5	17.0	378	14	US-10-164-966-4	Sequence 4, Appl
39	295	17.0	229	16	US-10-767-701-37804	Sequence 37804, A
40	290.5	16.7	327	15	US-10-287-226-670	Sequence 670, App
41	285.5	16.4	313	15	US-10-287-226-673	Sequence 673, App
42	278.5	16.0	329	15	US-10-377-072-17	Sequence 17, Appl
43	278.5	16.0	329	16	US-10-377-072-17	Sequence 17, Appl
44	274.5	15.8	329	15	US-10-264-237-2128	Sequence 2128, Ap
45	274.5	15.8	329	15	US-10-114-230-164	Sequence 164, App

ALIGNMENTS

RESULT 1  
US-09-789-300A-2  
; Sequence 2, Application US/09789300A  
; Publication No. US20020115137A1  
; GENERAL INFORMATION:  
; APPLICANT: Meyers, Rachel  
; APPLICANT: Rudolph-Owen, Laura A.  
; TITLE OF INVENTION: 22406, A No. 6458576el Human Pyridoxal-Phosphate  
; TITLE OF INVENTION: Dependent Enzyme Family Member and Uses Therefore  
; FILE REFERENCE: 35800/208926  
; CURRENT APPLICATION NUMBER: US/09/789,300A  
; CURRENT FILING DATE: 2001-02-20  
; PRIOR APPLICATION NUMBER: US 60/183,208  
; PRIOR FILING DATE: 2000-02-17  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 2  
; LENGTH: 340  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-789-300A-2

Query Match		90.9%	Score 1582.5;	DB 9;	Length 340;
Best Local Similarity		89.7%	Pred. NO. 3.7e-146;		
Matches 305;		Conservative 19;	Mismatches 15;	Indels 1;	Gaps 1;
QY	1	MCAQYCISFADVEKAHINIO	DSIHLTPVLVTSSTLNIOAGRNLFKCELFORTSGFKIRGA	60	
Db	1	MCAQYCISFADVEKAHINIRDSIHLTPVLVTSSTLNIOAGRNLFKCELFORTSGFKIRGA	60		
QY	61	LNAIRGLIDTPEEKPAKVVTHTSSGNHGQALTYAAKLEGIPAYIVVPTAPNCKKLAIOA	120		
Db	61	LNAIRGLIDTPEEKPAKVVTHTSSGNHGQALTYAAKLEGIPAYIVVPTAPNCKKLAIOA	120		
QY	121	YGASIVYCDPSDESREKVTQRMQETEGILVHPNQEPVIAAGGTIALEVIVNQVPLVDAL	180		

Db 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHPNQEPVAVIAGOGTIALEVLNQVPLVDAL 180  
QY 181 VVPVGGGVMVAGIATITKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPETIADGV 240  
Db 181 VVPVGGGMLAGIATITKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPETIADGV 240  
QY 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300  
Db 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300  
QY 301 VSPEVKNCIVLGGNVDLT-SLNWVGQAEPAQYQTVSV 339  
Db 301 VSPEVKNCIVLGGNVDLTSSITWVQAEPAQYQSVSV 340

RESULT 2  
US-10-164-966-2  
; Sequence 2, Application US/10164966  
; Publication No. US20030064439A1  
; GENERAL INFORMATION:  
; APPLICANT: Bandaru, Rajasehkar  
; APPLICANT: Glucksmann, Maria Alexandra  
; APPLICANT: Meyers, Rachel E.  
; APPLICANT: Rudolph-Owen, Laura A.  
; TITLE OF INVENTION: Novel Nucleic Acid Sequences Encoding Melanoma  
; TITLE OF INVENTION: Associated Antigen Molecules, Aminotransferase  
; TITLE OF INVENTION: Molecules, ATPase Molecules, Acyltransferase Molecules,  
; TITLE OF INVENTION: Pyridoxal-Phosphate Dependant Enzyme Molecules and Uses  
; FILE REFERENCE: 35800/247400  
; CURRENT APPLICATION NUMBER: US/10/164, 966  
; CURRENT FILING DATE: 2002-06-07  
; PRIOR APPLICATION NUMBER: 10/034, 864  
; PRIOR FILING DATE: 2001-12-27  
; PRIOR APPLICATION NUMBER: 60/258, 517  
; PRIOR FILING DATE: 2000-12-28  
; PRIOR APPLICATION NUMBER: 09/996, 194  
; PRIOR FILING DATE: 2001-11-28  
; PRIOR APPLICATION NUMBER: 60/250, 348  
; PRIOR FILING DATE: 2000-11-30  
; PRIOR APPLICATION NUMBER: 60/250, 073  
; PRIOR FILING DATE: 2000-11-30  
; PRIOR APPLICATION NUMBER: 60/253, 878  
; PRIOR FILING DATE: 2000-11-29  
; PRIOR APPLICATION NUMBER: 60/250, 338  
; PRIOR FILING DATE: 2000-11-20  
; PRIOR APPLICATION NUMBER: 09/908, 928  
; PRIOR FILING DATE: 2001-07-19  
; PRIOR APPLICATION NUMBER: 60/220, 465  
; PRIOR FILING DATE: 2000-07-20  
; PRIOR APPLICATION NUMBER: 09/908, 180  
; PRIOR FILING DATE: 2001-07-18  
; PRIOR APPLICATION NUMBER: 60/219, 740  
; PRIOR FILING DATE: 2000-07-20  
; PRIOR APPLICATION NUMBER: 09/887, 389  
; PRIOR FILING DATE: 2001-06-22  
; PRIOR APPLICATION NUMBER: 60/214, 138  
; PRIOR FILING DATE: 2000-06-26  
; PRIOR APPLICATION NUMBER: 09/789, 300  
; PRIOR FILING DATE: 2001-02-20  
; PRIOR APPLICATION NUMBER: 60/183, 208  
; PRIOR FILING DATE: 2000-02-17  
; NUMBER OF SEQ ID NOS: 43  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 2  
; LENGTH: 340  
; TYPE: PRT  
; ORGANISM: Homo sapiens

US-10-164-966-2  
Query Match 90.9%; Score 1582.5; DB 14; Length 340;  
Best Local Similarity 89.7%; Pred. No. 3,7e-146;  
Matches 305; Conservative 19; Mismatches 15; Indels 1; Gaps 1;  
1  
QY 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHPNQEPVAVIAGOGTIALEVLNQVPLVDAL 180  
Db 181 VVPVGGGVMVAGIATITKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPETIADGV 240  
Db 181 VVPVGGGMLAGIATITKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPETIADGV 240  
QY 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300  
Db 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300  
QY 301 VSPEVKNCIVLGGNVDLT-SLNWVGQAEPAQYQTVSV 339  
Db 301 VSPEVKNCIVLGGNVDLTSSITWVQAEPAQYQSVSV 340

QY 1 MCAQYCIISFADVEKAHINIQDSIHLTPVLTSSILNQIAGRNLPFKCFLFQKTSFKIRGA 60  
Db 1 MCAQYCIISFADVEKAHINIQDSIHLTPVLTSSILNQIAGRNLPFKCFLFQKTSFKIRGA 60  
QY 61 LNAIRGLIPDTPPEKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVVQTPAPNCKKLAIOA 120  
Db 61 LNAIRGLIPDTPPEKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVVQTPAPNCKKLAIOA 120  
QY 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHPNQEPVAVIAGOGTIALEVLNQVPLVDAL 180  
Db 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHPNQEPVAVIAGOGTIALEVLNQVPLVDAL 180  
QY 181 VVPVGGGVMVAGIATITKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPETIADGV 240  
Db 181 VVPVGGGMLAGIATITKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPETIADGV 240  
QY 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300  
Db 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300  
QY 301 VSPEVKNCIVLGGNVDLT-SLNWVGQAEPAQYQTVSV 339  
Db 301 VSPEVKNCIVLGGNVDLTSSITWVQAEPAQYQSVSV 340

RESULT 3  
US-10-240-800-2  
; Sequence 2, Application US/10240800  
; Publication No. US20030212262A1  
; GENERAL INFORMATION:  
; APPLICANT: Merck & Co., Inc.  
; TITLE OF INVENTION: HUMAN SERINE RACEMASE  
; FILE REFERENCE: 20642Y-PCT  
; CURRENT APPLICATION NUMBER: US/10/240, 800  
; CURRENT FILING DATE: 2002-10-03  
; PRIOR APPLICATION NUMBER: 60/194, 451  
; PRIOR FILING DATE: 2000-04-04  
; NUMBER OF SEQ ID NOS: 8  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 2  
; LENGTH: 340  
; TYPE: PRT  
; ORGANISM: Homo Sapien  
US-10-240-800-2  
Query Match 90.9%; Score 1582.5; DB 15; Length 340;  
Best Local Similarity 89.7%; Pred. No. 3,7e-146;  
Matches 305; Conservative 19; Mismatches 15; Indels 1; Gaps 1;  
1  
QY 1 MCAQYCIISFADVEKAHINIQDSIHLTPVLTSSILNQIAGRNLPFKCFLFQKTSFKIRGA 60  
Db 1 MCAQYCIISFADVEKAHINIQDSIHLTPVLTSSILNQIAGRNLPFKCFLFQKTSFKIRGA 60  
QY 61 LNAIRGLIPDTPPEKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVVQTPAPNCKKLAIOA 120  
Db 61 LNAIRGLIPDTPPEKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVVQTPAPNCKKLAIOA 120  
QY 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHPNQEPVAVIAGOGTIALEVLNQVPLVDAL 180  
Db 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHPNQEPVAVIAGOGTIALEVLNQVPLVDAL 180  
QY 181 VVPVGGGVMVAGIATITKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPETIADGV 240  
Db 181 VVPVGGGMLAGIATITKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPETIADGV 240  
QY 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300  
Db 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300  
QY 301 VSPEVKNCIVLGGNVDLT-SLNWVGQAEPAQYQTVSV 339  
Db 301 VSPEVKNCIVLGGNVDLTSSITWVQAEPAQYQSVSV 340





Db 77 FALDDD---EASKGVVTHSSGNHAAVALAAKLGIPAYIIPRNAPACKVDNVKRYGGH 133  
QY 125 IYVCDPDESREKVTORIMQETGILVHPNOEPAVIAGQGTIALEVLNQVPLVDALVVPV 184  
Db 134 IISDVSTESRESVAKRVOEBTGAILVHPFNKNTISGGQTVSLLEVEPEIDTIIVPI 193  
QY 185 GGGMVAGIATIKALKPSVKVYAAEPSNADDCYQSKLGELTPNLHPPTIADGVKSSI 244  
Db 194 SGGGLISGVALAAKAINPSIRILAEPEKGADDSQAQKAAGKII-TLPSTNTIADGLRAF 252  
QY 245 GLNTWPIIRDLDVDDVFTTDEIKYATQLVWGRMKLLIETAGVLAALVLSQHFQTVSP- 303  
Db 253 GDLTPWVVRDLVDIIIVDDNAIVDAMKCMYEMLKVAVEPSGAIGLAALSDEFKQSSAW 312  
QY 304 -EVKNVCIVLGGNVLDLTSLNW 324  
Db 313 HESSKIGIIVSGNVDLGLV-W 333

## RESULT 7

US-10-425-114-49567  
; Sequence 49567, Application US/10425114  
; Publication No. US20040034888A1  
; GENERAL INFORMATION:  
; APPLICANT: Liu, Jingdong  
; APPLICANT: Zhou, Yihua  
; APPLICANT: Kovalic, David K.  
; APPLICANT: Screen, Steven E  
; APPLICANT: Tabaska, Jack E  
; APPLICANT: Cao, Yongwei

; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With  
; FILE REFERENCE: 38-21(53313)B  
; CURRENT APPLICATION NUMBER: US/10/425,114  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 73128  
; SEQ ID NO 49567  
; LENGTH: 379  
; TYPE: PRT  
; ORGANISM: Zea mays  
; FEATURE:  
; OTHER INFORMATION: Clone ID: 700335017\_FLI.pep  
US-10-425-114-49567

Query Match 42.7%; Score 743.5; DB 15; Length 379;  
Best Local Similarity 45.3%; Pred. No. 7.4e-64;  
Matches 146; Conservative 65; Mismatches 104; Indels 7; Gaps 4;

QY 5 YCISPADVEKAHINIQDSIHLTPVLTSILNQIAGRNLPFKCBLFOKTSFKIRGALNAI 64  
Db 57 YAADIDSIREAQARIAPVHRTVMSSTSIDAMVKKLFFKCECFQKAGAFKIRGASNSI 116  
QY 65 RGLIPDTPPEKPAVTHSSGNHCOALTYAAKLEGIPAYIVVPOTPANCKKLAIAQYGAS 124  
Db 117 FAL---DDEQVSKGVVTHSSGNHAAVALAAKLGIPAHIVIPRNAPACKVENVKRYGGH 173  
QY 125 IYVCDPDESREKVTORIMQETGILVHPNOEPAVIAGQGTIALEVLNQVPLVDALVVPV 184  
Db 174 IISDASIESREYVKRVQEBTGAVLIHPNSKYTISGGQTVSLLEVEQVPIDTIIVPI 233  
QY 185 GGGMVAGIATIKALKPSVKVYAAEPSNADDCYQSKLGELTPNLHPPTIADGVKSSI 244  
Db 234 SGGGLISGVALAAKAINPSIRILAEPEKGADDSQAQKAAGKII-TLPSTNTIADGLRAF 292  
QY 245 GLNTWPIIRDLDVDDVFTTDEIKYATQLVWGRMKLLIETAGVLAALVLSQHFQTVSP- 303  
Db 293 GDLTPWVVRDLVDIIIVDDTAIVDAMKCMYEMLKVAVEPSGAIGLAALSDEFKQSSAW 352  
QY 304 -EVKNVCIVLGGNVLDLTSLNW 324  
Db 353 HESSKIGIIVSGNVDLGLV-W 373

## RESULT 8

US-10-425-114-62761  
; Sequence 62761, Application US/10425114  
; Publication No. US20040034888A1  
; GENERAL INFORMATION:  
; APPLICANT: Liu, Jingdong  
; APPLICANT: Zhou, Yihua  
; APPLICANT: Kovalic, David K.  
; APPLICANT: Screen, Steven E  
; APPLICANT: Tabaska, Jack E  
; APPLICANT: Cao, Yongwei

; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With  
; FILE REFERENCE: 38-21(53313)B  
; CURRENT APPLICATION NUMBER: US/10/425,114  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 73128  
; SEQ ID NO 62761  
; LENGTH: 280  
; TYPE: PRT  
; ORGANISM: Zea mays  
; FEATURE:  
; OTHER INFORMATION: Clone ID: LIB3591-097-G1\_FLI.pep  
US-10-425-114-62761

Query Match 36.8%; Score 640.5; DB 15; Length 280;  
Best Local Similarity 46.7%; Pred. No. 5.8e-54;  
Matches 128; Conservative 55; Mismatches 84; Indels 7; Gaps 4;  
QY 53 GSPFKIRGALNATIRGLIPTPEKPAVTHSSGNHCOALTYAAKLEGIPAYIVVPOTPAN 112  
Db 6 GAFKIRGASNSIFAL---DDEQVSKGVVTHSSGNHAAVALAAKLGIPAHIVIPRNAP 62  
QY 113 CKKLAIQAYGASIVVCDPDESREKVTORIMQETGILVHPNOEPAVIAGQGTIALEVLN 172  
Db 63 CKVENVKRYGGHIIWSDASIESREYVKRVQEBTGAVLIHPNSKYTISGGQTVSLELLE 122  
QY 173 QVPLVDALVVPVGGGVMVAGIATIKALKPSVKVYAAEPSNADDCYQSKLGELTPNLHP 232  
Db 123 QVPEIDTIIVPIISGGGLISGVALAAKAINPSIRILAEPEKGADDSQAQKAAGKII-TLPS 181  
QY 233 PETIADGVKSSIGLNTWPIIRDLDVDDVFTTDEIKYATQLVWGRMKLLIETAGVLAAL 292  
Db 182 TNTIADGLRAFPLGDLTPWVVRDLVDIIIVDDTAIVDAMKCMYEMLKVAVEPSGAIGLAA 241  
QY 293 VLSQHFQTVSP--EVKNVCIVLGGNVLDLTSLNW 324  
Db 242 ALSDEFKQSSAWHESSKIGIIVSGNVDLGLV-W 274

## RESULT 9

US-10-424-599-155063  
; Sequence 155063, Application US/10424599  
; Publication No. US20040031072A1  
; GENERAL INFORMATION:  
; APPLICANT: La Rosa Thomas J  
; APPLICANT: Kovalic David K  
; APPLICANT: Zhou Yihua  
; APPLICANT: Cao Yongwei

; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
; FILE REFERENCE: 38-21(53223)B  
; CURRENT APPLICATION NUMBER: US/10/424,599  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 285684  
; SEQ ID NO 155063  
; LENGTH: 247  
; TYPE: PRT  
; ORGANISM: Glycine max  
; FEATURE:  
; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_111043C.1.pap  
US-10-424-599-155063

Query Match 33.2%; Score 577; DB 15; Length 247;  
Best Local Similarity 44.9%; Pred. No. 8.1e-48;  
Matches 109; Conservative 58; Mismatches 70; Indels 6; Gaps 4;

QY 85 GNHGOALTAAKLEGIPAYIVPOTAPNCKKLAIOAYGASIVYCDPSDESREKVTQRIHQ 144  
DB 1 GNHAAALAAKLGIFSYIVIPKNATCKIENRYGGQVWVSEASVQSRKEETANKVWQ 60

QY 145 ETEGILVHPNQEPAVIAGQGTIALEVLNQVPLVDALVVPVGGGVMAGIAITIKALPSPV 204  
DB 61 ESGAIFHPYNDGRILSGQGTISLEILEQAQIDTLVPISSGGGLSGIALAASKINPAI 120

QY 205 KYVAAEPSNADDCVQSKLKGELTNLHPPTIADGVKSSIGLNTWPIIRDLVDDVFTVTE 264  
DB 121 RIFAAEPKGDADDAQSKAAGRII-RLPETNTIADGLRAFLGDEFTWVVRDLVEEIIITVED 179

QY 265 DEIKYATQLVGMRKLLIETAGVALAALVLSQHFQTVSP--EVKNVCIVLSGGNVDLTS 321  
DB 180 SEIKAMKLCFEILKVVPVSESGAIGLAALVSDTFQK-NPAWKDCNHHIGIVVSGNVDLW 238

QY 322 LNW 324  
DB 239 L-W 240

RESULT 10  
US-10-767-701-43071  
; Sequence 43071, Application US/10767701  
; Publication No. US20040172684A1  
; GENERAL INFORMATION:  
; APPLICANT: Kovalic, David K.  
; APPLICANT: Zhou, Yihua  
; APPLICANT: Cao, Yongwei  
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With  
; FILE OF INVENTION: Plants and Uses Thereof For Plant Improvement  
; FILE REFERENCE: 38-21(53535)B  
; CURRENT APPLICATION NUMBER: US/10767,701  
; CURRENT FILING DATE: 2004-01-29  
; NUMBER OF SEQ ID NOS: 63128  
; SEQ ID NO 43071  
; LENGTH: 252  
; TYPE: PRT  
; ORGANISM: Sorghum bicolor  
; NAME/KEY: unsure  
; LOCATION: (1)..(252)  
; OTHER INFORMATION: unsure at all Xaa locations  
; FEATURE:  
; OTHER INFORMATION: Clone ID: SORBI-28MAY03-C9309\_1.pap  
US-10-767-701-43071

Query Match 28.7%; Score 499.5; DB 16; Length 252;  
Best Local Similarity 42.6%; Pred. No. 3.3e-40;  
Matches 104; Conservative 48; Mismatches 87; Indels 5; Gaps 4;

QY 84 SGNHGOALTAAKLEGIPAYIVPOTAPNCKKLAIOAYGASIVYCDPSDESREKVTQRIHQ 143  
DB 5 SGNHAAVALAAKLGIPAHIVIPRNAPACKVENRYGGHIIRSDVIESREKRVQ 64

QY 144 QETEGILVHPNQEPAVIAGQGTIALEVLNQVPLVDALVVPVGGGVMAGIAITIKALPSPV 203  
DB 65 EETGAVLHPFNKYITISGGTISLEILEQAQIDTLVCSGGXISGVTLLAAMAINPS 124

QY 204 KYVAAEPSN-ADDCVQSKLKGELTNLHPPTIADGVKSSIGLNTWPIIRDLVDDVFTVTE 262  
DB 125 IRLAAEPKGDADDAQSKAAGKII-TLPSTNTIADGLRAFLGDLTPVVRDLVGGVIVV 183

QY 263 TEDEIKYATQLVGMRKLLIETAGVALAALVLSQHFQTVSP--EVKNVCIVLSGGNVDLT 320  
DB 184 DATAIVAMRVCHELLEAVEPRGAIGLAALVSDTFQSKSSAWHESKIGIIVSGNVDLG 243

QY 321 SLNW 324

Db 244 TL-W 246

RESULT 11  
US-10-156-761-10839  
; Sequence 10839, Application US/10156761  
; Publication No. US20030119018A1  
; GENERAL INFORMATION:  
; APPLICANT: OMURA, SATOSHI  
; APPLICANT: IKEDA, HARUO  
; APPLICANT: ISHIKAWA, JUN  
; APPLICANT: HORIKAWA, HIROSHI  
; APPLICANT: SHIBA, TADAYOSHI  
; APPLICANT: SAKAKI, YOSHIYUKI  
; APPLICANT: HATTORI, MASAHIRA  
; TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES  
; FILE REFERENCE: 249-262  
; CURRENT APPLICATION NUMBER: US/10/156,761  
; CURRENT FILING DATE: 2002-05-29  
; PRIOR APPLICATION NUMBER: JP 2001-204089  
; PRIOR FILING DATE: 2001-05-30  
; PRIOR APPLICATION NUMBER: JP 2001-272697  
; PRIOR FILING DATE: 2001-08-02  
; NUMBER OF SEQ ID NOS: 15109  
; SEQ ID NO 10839  
; LENGTH: 409  
; TYPE: PRT  
; ORGANISM: Streptomyces avermitilis  
US-10-156-761-10839

Query Match 27.9%; Score 485.5; DB 14; Length 409;  
Best Local Similarity 37.7%; Pred. No. 1.1e-38;  
Matches 118; Conservative 50; Mismatches 136; Indels 9; Gaps 4;

QY 7 ISPADVEKAHINTQDSIHLPVLTSSILNQIAGRNLPFKCELFOKTSFKIRGALNAIRG 66  
DB 12. VTLDDVVRGAQKMLAGVARMTEGSRHLSQLVGAHPVHFKCENLQRTSGFKLRGAYVRIAG 71

QY 67 LIPDTPPEKPKAVVTHSSGNHGOALTAAKLEGIPAYIVPOTAPNCKKLAIOAYGASIV 126  
DB 72 LL---PEERAAGVVAASAGNHAQGVALLSLGVRSTVFMKAAPLPKISATREYGAERV 128

QY 127 YCDPSDESREKVTQRIHQETEGILVHPNQEPAVIAGQGTIALEVLNQVPLVDALVVPVGG 186  
DB 129 LHGTVVDETLLAAQEAETGAVFIHPFDHPDIIAGQGTGVLGLEILEQCPEVRTIVVGIGG 188

QY 187 GGMVAGIATIKALPSPVYVAAEPSNADDCVQSKLKGELTNLHPPTIADGVK-SSIG 245  
DB 189 GGLAGIATATVAKALRPDVRIVGVQAAGA-AAYPPLAAGRPSVENPATWADGIKVRPG 247

QY 246 LNTWPIIRDLVDDVFTVTEDEIKYATQLVGMRKLLIETAGVALAALVLSQHFQTVSP 305  
DB 248 DVPFRIIGDLVDEVRTVSEGNLSSALLCLERAKLVVEPAGASPVALLREPAGFEGP-- 305

QY 306 KNVCIVLSGGNVD 318  
DB 306 --VVALVSGGNVD 316

RESULT 12  
US-10-413-943-33  
; Sequence 33, Application US/10413943  
; Publication No. US20040006784A1  
; GENERAL INFORMATION:  
; APPLICANT: Mourad, George S.  
; TITLE OF INVENTION: Methods and Compositions for Producing Plants and Microorganisms  
; FILE OF INVENTION: that Express Feedback Insensitive Threonine Dehydratase/Deaminase  
; FILE REFERENCE: PRF-07898  
; CURRENT APPLICATION NUMBER: US/10/413,943  
; CURRENT FILING DATE: 2003-04-15  
; NUMBER OF SEQ ID NOS: 69  
; SOFTWARE: PatentIn version 3.2

```
; SEQ ID NO 33
; LENGTH: 329
; TYPE: PRT
; ORGANISM: Escherichia coli
US-10-413-943-33

Query Match      27.4%; Score 476; DB 15; Length 329;
Best Local Similarity 35.9%; Pred. No. 9.9e-38;
Matches 118; Conservative 70; Mismatches 117; Indels 24; Gaps 8;

QY 7 ISPADVEKHAHINQDSIHLTPVLTSILNQIAGRNLFKCELFQKTGSKIRGALNAIRG 66
DB 9 VALDIIIEAKQRLAGRIYKTMPSRNFYSERCKGEIFLKFENMQRTGSKIRGAFNKLSS 68
QY 67 LIPDTPPEPKAVVTHSSNGHQAALTYAAKLEGIPAYIVVQTPAPNCKKLAIOAYGASIV 126
DB 69 L---TDAERKRGVAVACSAGNHAQGVSLSCAMLGIDGVKVPKGPAPSKVAATCDYSAEVV 125
QY 127 -YCDPDSERKVTQRIQMETEG-ILVHPNQEPAVIAGQGTIALEVLNOVPLVDALVVPV 184
DB 126 LHGDNFNDDTIKAVSEIV--EMEGRIPIPPYDDPKVIAGQGTIGLEIMEDLYVDNVIVFI 183
QY 185 GGGGWAGIAITIKALKPSVKVYAAEPSNADDCYQSKLKGELTPNLPHPETIADGVK-SS 243
DB 184 GGGGLIAGIAVAIKSINPTIRVIGVQSENVHGMASPHSGEITTH-RTTGTLAGGCDVSR 242
QY 244 IGLNTWPIIRDLDVDDVTTVEDEIKYATQLVWGRMKLLIETPTAGVALAAVLS-----Q 296
DB 243 PGNLTUYEIVRELVDVILVSEDEIRNSMIALIQRNKVYVTEGAGALACAALLSGKLDQYIQ 302
QY 297 HFQTVSPVKNVCIVLSGGNVDLTSLNMV 325
DB 303 NRKTVS-----IISGGNIDLSRVSQI 323

RESULT 13
US-10-413-943-29
; Sequence 29, Application US/10413943
; Publication No. US20040006784A1
; GENERAL INFORMATION:
; APPLICANT: Mourad, George S,
; TITLE OF INVENTION: Methods and Compositions for Producing Plants and Microorganisms
; TITLE OF INVENTION: that Express Feedback Insensitive Threonine Dehydratase/Deaminase
; FILE REFERENCE: PRF-07898
; CURRENT APPLICATION NUMBER: US/10/413,943
; CURRENT FILING DATE: 2003-04-15
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 29
; LENGTH: 576
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-10-413-943-29

Query Match      22.6%; Score 392.5; DB 15; Length 576;
Best Local Similarity 32.5%; Pred. No. 3.5e-29;
Matches 104; Conservative 67; Mismatches 132; Indels 17; Gaps 10;

QY 18 NIQDSIHLTPVLTSILNQIAGRNLFKCELFQKTGSKIRGALNAIRGLIPTPEPKP 77
DB 71 SVYDVINESPISQGVLSRLNTNVILKREDLLPVFSFKLRGAYNMIACL---DQSQRN 127
QY 78 AVVTHSSNGHQAALTYAAKLEGIPAYIVVQTPAPNCKKLAIOAYGASIV-YCDPDSER 136
DB 128 GVICSAGNHAQGVAFAAKHUKIPATIVMPVCTSIKQNVSRIGSQVVLVGNDFDEAKA 187
QY 137 KVTQRIQMETEGIL-VHPNQEPAVIAGQGTIALEVLNOVPL---VDALVVPVGGGVAG 192
DB 188 ECAK--LAEERGLTNI PFDHPYVIAGQGTIVAMEILRQVRTANKIGAVFVPVGGGLIAG 245
QY 193 IAITIKALKPSVKVYAAEPSNADDCYQSKLKGELTPNLPHPETIADGVK-SSIGLNTWPI 251
DB 246 IGAVLKRVPVAPHTIGVETYDAATLHNSLQNRQTP-LPVVGTTFADGTSVRMIGETFRV 304
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QY 252 IRDLVDVDTVTDEDEIKYATQLVWGRMKLLIETPTAGVALAAVLSQHFOVTSPEV---KRV 308
DB 305 AQOVVDEVVIVNTDEICAAVDKIDFEDTSIVSPSGALSAG-MKKYISTVHPHEDHTKNT 363
QY 309 CI-VLSGGNVDLTSLNMVQ 327
DB 364 VVPILSGANMFDRLRFVSE 383

RESULT 14
US-10-413-943-31
; Sequence 31, Application US/10413943
; Publication No. US20040006784A1
; GENERAL INFORMATION:
; APPLICANT: Mourad, George S,
; TITLE OF INVENTION: Methods and Compositions for Producing Plants and Microorganisms
; TITLE OF INVENTION: that Express Feedback Insensitive Threonine Dehydratase/Deaminase
; FILE REFERENCE: PRF-07898
; CURRENT APPLICATION NUMBER: US/10/413,943
; CURRENT FILING DATE: 2003-04-15
; NUMBER OF SEQ ID NOS: 69
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 31
; LENGTH: 514
; TYPE: PRT
; ORGANISM: Salmonella typhimurium
US-10-413-943-31

Query Match      22.1%; Score 384; DB 15; Length 514;
Best Local Similarity 32.3%; Pred. No. 2e-28;
Matches 102; Conservative 69; Mismatches 127; Indels 18; Gaps 8;

QY 19 IQDSIHLTPVLTSILNQIAGRNLFKCELFQKTGSKIRGALNAIRGLIPTPEPKPA 78
DB 25 VYERAAQVTEPQWKEKLSRLDNVILVKREDRQPVHSFKLRGAYAMAGL---TEEQKAGH 81
QY 79 VVTHSSNGHQAALTYAAKLEGIPAYIVVQTPAPNCKKLAIOAYGASIVVYCDPS-DESREK 137
DB 82 VITASAGNHAQGVAFSSARLGVKSLIVMPKATADIKVDAVRGFGGEVLHGANFDEAKAK 141
QY 138 VVQRIQMETEGILVHPNQEPAVIAGQGTIALEVLNOVPLVDALVVPVGGGVAGIAITI 197
DB 142 AIE-LAQOQGFVTPVFPDHPVIAAGQGTIALELQDSDHLDRLVFPVGGGLAAGVAVLI 200
QY 198 KALKPSVKVYAAEPSNADD--CYQSKLKGELTPNLPHPETIADGVK-SSIGLNTWPIIRD 254
DB 201 KQLMPOIKVIAVE--AEDSACLKALEAGHPVDLPRVGLFAEGVAVKVRIGDETFLCQE 257
QY 255 LVDDVDTVTDEDEIKYATQLVWGRMKLLIETPTAGVALAAV---LSQHFOVTSPEVKNVCIV 311
DB 258 YLDDIITVDSDAICAAAMKOLFEDVRAVAFSPSGALAGMKKYIAQH---NIRGERLAHV 313
QY 312 LSGGNVDLTSLNMVQ 327
DB 314 LSGANVFHGLRYVSE 329

RESULT 15
US-10-424-599-266101
; Sequence 266101, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated with
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
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; SEQ ID NO 266101
; LENGTH: 602
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_8230C.1.pep
US-10-424-599-266101

Query Match      21.8%; Score 380; DB 15; Length 602;
Best Local Similarity 31.8%; Pred. No. 6.4e-28;
Matches 103; Conservative 65; Mismatches 118; Indels 38; Gaps 11;

QY 17 INTODSHLTPLVLTSSILNQIAGRNLPFKCELFQKTSFKIRGALNAIRGLIPTPEKP 76
Db 117 VAIESPLQLAPKUSARL-----GVKWLKKREDLQPVFSFKLRGAYNNMAKLPTELLE--- 168

QY 77 KAVVTHSSGNHGQALTYAAKLEGIPAYIVVPQTAPNCKKLAIOAYGASIVYC-DPSDESR 135
Db 169 KGVICSSAGNHAQGVALLAKRLNCSAVIANPVTTPETIKWKSVEALGATVVLVGDSYDEAQ 228

QY 136 EKVTRIMQTEGILVHPNOEPVIAQGQTIALEVLNQV--PLVDALVVPVGGGMVAGI 193
Db 229 AVAKKRGVEGR-TFVPPFDHPDVMGQGTIGMEIVRQMGPIF-AIFVFPVGGGLIAGI 286

QY 194 AITIKALKPSVKVYAAEPSNADDCYQSKLKGELTPNLHPPETI-----ADGVK-SSI 244
Db 287 AAYVKRVKPEVKIFGVEPTDAN-----AMALSLHHDQRVILDQVGGFADGVAVKEY 337

QY 245 GLNTWPIRLDLDVDDFTVTDEIKYATQLVGRMKLLIEPTAGVALA---AVLSQHFQTV 301
Db 338 GEFTFRICKELIDGVVLVSRDSICASKDMFEKRNILEPAGALALAGAEAYCKHH----- 393

QY 302 SPEVKNVCIVLGGNVDLTSLNWV 325
Db 394 GVQGKDIWITSGANMFDKLRVV 417
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Search completed: April 22, 2005, 16:42:20  
Job time : 89.3697 secs

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OM protein - protein search, using sw model

Run on: April 22, 2005, 16:19:29 ; Search time 30.0442 Seconds  
(without alignments)  
844.779 Million cell updates/sec

Title: US-09-889-609B-10

Perfect score: 1735

Sequence: 1 MCAQYCISPADVEKAHINIR.....SSITWVKQAEKPASVSV 340

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:\*

- 1: /cgn2\_6/ptodata/1/iaa/5A\_COMB.pep.\*
- 2: /cgn2\_6/ptodata/1/iaa/5B\_COMB.pep.\*
- 3: /cgn2\_6/ptodata/1/iaa/6A\_COMB.pep.\*
- 4: /cgn2\_6/ptodata/1/iaa/6B\_COMB.pep.\*
- 5: /cgn2\_6/ptodata/1/iaa/PCTUS\_COMB.pep.\*
- 6: /cgn2\_6/ptodata/1/iaa/backfilee1.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1735	100.0	340	4	US-09-789-300A-2
2	601	34.6	332	4	US-09-543-681A-4645
3	578	33.3	328	4	US-09-328-352-4536
4	538	31.0	374	4	US-09-252-991A-31294
5	457	26.3	524	4	US-09-252-991A-27783
6	445	25.6	405	4	US-09-302-540-12639
7	443.5	25.6	411	4	US-09-328-352-5207
8	442	25.5	334	4	US-09-489-039A-14107
9	403	23.2	677	4	US-09-252-991A-22442
10	393	22.7	525	4	US-09-543-681A-4364
11	375	21.6	507	4	US-09-424-978B-34
12	369	21.3	521	4	US-09-489-039A-8050
13	367	21.2	424	3	US-09-134-001C-3876
14	367	21.2	424	4	US-09-710-279-1046
15	355	20.5	518	4	US-09-340-236-3648
16	348.5	20.1	441	1	US-08-403-866-10
17	344.5	19.9	520	4	US-09-328-352-7451
18	336	19.4	421	4	US-09-107-433-2928
19	330	19.0	416	4	US-09-583-110-3878
20	310.5	17.9	436	3	US-08-669-378-2
21	310.5	17.9	436	3	US-08-669-378-12
22	309.5	17.8	436	3	US-08-669-378-4
23	309.5	17.8	436	3	US-08-669-378-6
24	309.5	17.8	436	3	US-08-669-378-10
25	307.5	17.7	436	3	US-08-669-378-8
26	283.5	16.3	378	4	US-09-789-300A-4
27	277.5	16.0	329	4	US-09-843-297-2

28	274.5	15.8	347	4	US-09-949-016-10697	Sequence 10697, A
29	265.5	15.3	328	4	US-09-949-016-6763	Sequence 6763, Ap
30	259.5	15.0	325	3	US-09-088-435-1	Sequence 1, Appli
31	256	14.8	331	4	US-09-252-991A-29393	Sequence 29393, A
32	242.5	14.0	373	4	US-09-248-796A-18227	Sequence 18227, A
33	241.5	13.9	367	3	US-09-134-001C-4168	Sequence 4168, Ap
34	237	13.7	392	4	US-09-424-978B-29	Sequence 29, Appl
35	211	12.2	387	4	US-09-248-796A-18228	Sequence 18228, A
36	196.5	11.3	308	4	US-09-583-110-4369	Sequence 4369, Ap
37	196.5	11.3	317	4	US-09-107-433-4532	Sequence 4532, Ap
38	195	11.2	303	4	US-09-107-532A-3925	Sequence 3925, Ap
39	193.5	11.2	398	4	US-09-248-796A-17694	Sequence 17694, A
40	191	11.0	225	4	US-09-134-000C-3983	Sequence 3983, Ap
41	190.5	11.0	311	4	US-09-962-357-5	Sequence 5, Appli
42	187	10.8	378	4	US-08-311-731A-161	Sequence 161, App
43	187	10.8	550	4	US-09-538-092-1075	Sequence 1075, Ap
44	187	10.8	551	1	US-08-120-960-2	Sequence 2, Appli
45	187	10.8	551	3	US-09-347-878-9	Sequence 9, Appli

ALIGNMENTS

RESULT 1

US-09-789-300A-2  
; Sequence 2, Application US/09789300A  
; Patent No. 6458576  
; GENERAL INFORMATION:  
; APPLICANT: Meyers, Rachel  
; APPLICANT: Rudolph-Owen, Laura A.  
; TITLE OF INVENTION: 2406, A No. 6458576el Human Pyridoxal-Phosphate  
; FILE REFERENCE: 35800/208926  
; CURRENT APPLICATION NUMBER: US/09/789,300A  
; CURRENT FILING DATE: 2001-02-20  
; PRIOR APPLICATION NUMBER: US 60/183,208  
; PRIOR FILING DATE: 2000-02-17  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 2  
; LENGTH: 340  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-789-300A-2

Query Match	100.0%;	Score 1735;	DB 4;	Length 340;
Best Local Similarity	100.0%;	Pred. No. 4.5e-189;		
Matches 340;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
QY	1	MCAQYCISPADVEKAHINIRDSIHLPVLTSSILNLTGRNLPFKCELFOKTSFKIRGA	60	
Db	1	MCAQYCISPADVEKAHINIRDSIHLPVLTSSILNLTGRNLPFKCELFOKTSFKIRGA	60	
QY	61	LNARSLVDPALERKPKAVVTHSSGNHGOALTAAKLEGIPAYIVVPOTPADCKKLAIOA	120	
Db	61	LNARSLVDPALERKPKAVVTHSSGNHGOALTAAKLEGIPAYIVVPOTPADCKKLAIOA	120	
QY	121	YGASIVYCEPSDESRENKRVTEETEGIMVHPNQSPAVIAGQGTIALEVLNQPLVDAL	180	
Db	121	YGASIVYCEPSDESRENKRVTEETEGIMVHPNQSPAVIAGQGTIALEVLNQPLVDAL	180	
QY	181	VYPVGGGGLAGIAITVKALKPSVKVYAAEPNADDCYOSKLGKLMPLNLYPPETIADGV	240	
Db	181	VYPVGGGGLAGIAITVKALKPSVKVYAAEPNADDCYOSKLGKLMPLNLYPPETIADGV	240	
QY	241	KSGIGLNTWPIIRDLDVDDIFTVTDEIKCATQLWERMKLLIETPTAGVGVAAVLSQHFQT	300	
Db	241	KSGIGLNTWPIIRDLDVDDIFTVTDEIKCATQLWERMKLLIETPTAGVGVAAVLSQHFQT	300	
QY	301	VSPVKNICIVLSGGNVDLTSSITWVKQAEKPASVSV 340		
Db	301	VSPVKNICIVLSGGNVDLTSSITWVKQAEKPASVSV 340		

```
RESULT 2
US-09-543-681A-4645
; Sequence 4645, Application US/09543681A
; Patent No. 6605709
; GENERAL INFORMATION:
; APPLICANT: GARY BRETON
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABILIS
; FILE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.1002-001
; CURRENT APPLICATION NUMBER: US/09/543.681A
; CURRENT FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/128,706
; PRIOR FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 8344
; SEQ ID NO 4645
; LENGTH: 332
; TYPE: PRT
; ORGANISM: Proteus mirabilis
US-09-543-681A-4645

Query Match      34.6%; Score 601; DB 4; Length 332;
Best Local Similarity 40.6%; Pred. No. 1.3e-59;
Matches 127; Conservative 69; Mismatches 109; Indels 8; Gaps 5;

QY      8 SFADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFKCELFQKTSFKIRGALNAVRSL 67
Db      17 TYQDVVEAHOIRLPVINKTPILTSTRTINELTGAQFYKFCENFORIGAFKFRGANNALSQF 76

QY      68 VPDALERKPKAVVTHSSNGHQALTYAAKLEGIPAYIVVPQTAPDCCKKLAIQAYGASIVY 127
Db      77 TD---EQRNGVITSSNGHQAIALSKLIGIPATIIMPDBAPTAKNQATKGYGGRVIL 133

QY      128 CEPDSERENVAKRVTEETEGIMVHPNQEPAVIAGQGTIALEVLNQVPLVDALVVPVGGG 187
Db      134 YNRYTQDREEIGKLAQSEGLTLPYDHPVHVIAGQGTAAKELFEVGEGLDMLFVPLGGG 193

QY      188 GMLAGIAITVAKLPSVKVYAAEPSNADDCYOSKLGKLMNLYPPETIADGVKSS-IGL 246
Db      194 GLLSGSLSTKALSPHCRIFGVEPLAGNDGQOSLRKGEII-YIDTPKTIADGAQTQHLGD 252

QY      247 NTWPIIRDLVDIDFTVTEDEIKCATQLVWRMKLLIEPTAGVGAVALVSHQFQTVSPVK 306
Db      253 YTFEIRNNVDILTATDEELISAMQFVAQRMKLIVFTGCLSLAA--ARQFGD-KLKGK 309

QY      307 NICIVLSGGNVDL 319
Db      310 KIGIISGGNVDI 322

RESULT 3
US-09-328-352-4536
; Sequence 4536, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; FILE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC99-03PA
; CURRENT APPLICATION NUMBER: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 4536
; LENGTH: 328
; TYPE: PRT
; ORGANISM: Acinetobacter baumannii
US-09-328-352-4536

Query Match      33.3%; Score 578; DB 4; Length 328;
Best Local Similarity 41.5%; Pred. No. 5.4e-57;
Matches 131; Conservative 62; Mismatches 111; Indels 12; Gaps 5;

QY      8 SFADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFKCELFQKTSFKIRGALNAVRSL 67
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Db      14 NYEDVAAAARIKOFINKTPVLTSTRTVNNFEAFVFFKCFQVGVGAFKFRGANNA---L 70
QY      68 VPDALERKPKAVVTHSSNGHQALTYAAKLEGIPAYIVVPQTAPDCCKKLAIQAYGASIVY 127
Db      71 LQFNETQKAGVAVFSSNGHQAIALSKLIGIPATIIMPDKAPFAAKMAATREYGGNIVE 130
QY      128 CEPDSERENVAKRVTEETEGIMVHPNQEPAVIAGQGTIALEVLNQVPLVDALVVPVGGG 187
Db      131 FDRYTEDREKIGKIEAKNGLTLPISYDHPVHVIAGQGTAAKELFEVGEGLDMLFVPLGGG 190
QY      188 GMLAGIAITVAKLPSVKVYAAEPSNADDCYOSKLGKLMNLYPPETIADGVKSS-IGL 246
Db      191 GLLAGSALSALQSPKCKIYGVPEPALNGDQMSFRKGEIV-HIDTPTIADGAQTQYLGK 249
QY      247 NTWPIIRDLVDIDFTVTEDEIKCATQLVWRMKLLIEPTAGVGAVALVSHQFQTVSPVK 305
Db      250 LTFPIIQOKVDDILTVDDELINAMKFFAERMKNVVEPTGCLGFAAAA-----RNLKDELK 304
QY      306 -KNICIVLSGGNVDLT 320
Db      305 GKRIIGIISGGNVDIS 320

RESULT 4
US-09-252-991A-31294
; Sequence 31294, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 31294
; LENGTH: 374
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-31294

Query Match      31.0%; Score 538; DB 4; Length 374;
Best Local Similarity 37.7%; Pred. No. 2.5e-52;
Matches 118; Conservative 67; Mismatches 120; Indels 8; Gaps 4;

QY      8 SFADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFKCELFQKTSFKIRGALNAVRSL 67
Db      60 TYDDVIAAAARIAGHANRTPVMSRTLDEELGAEVFFKCFENLQRMGAFKFRGAFNALSRF 119

QY      68 VPDALERKPKAVVTHSSNGHQALTYAAKLEGIPAYIVVPQTAPDCCKKLAIQAYGASIVY 127
Db      120 ---SAEQRAAGVAFSSNGHQAIALSKLIGIPATIIMPADAPAVKIEATRCYGGGVVL 176
QY      128 CEPDSERENVAKRVTEETEGIMVHPNQEPAVIAGQGTIALEVLNQVPLVDALVVPVGGG 187
Db      177 YDRYTEDREQIGRDLAQRHGLTLPYDHPDVLVLAGQGTAAKELFEVGEGLDMLFVPLGGG 236
QY      188 GMLAGIAITVAKLPSVKVYAAEPSNADDCYOSKLGKLMNLYPPETIADGVKSS-IGL 246
Db      237 GLLSGCALAIRALAPACRIYGVPEAGNDQQRSLRSGAIV-HIDTPTIADGAQTQHLGN 295
QY      247 NTWPIIRDLVDIDFTVTEDEIKCATQLVWRMKLLIEPTAGVGAVALVSHQFQTVSPVK 306
Db      296 LTFPLQRNVDDILTASDAELVDGMRFLAARMKLLVEPTGCLGLAARQKDEL---RGK 352
QY      307 NICIVLSGGNVDL 319
Db      353 RVGILLSGGNIDL 365
```



RESULT 5  
US-09-252-991A-27783  
; Sequence 27783, Application US/09252991A  
; Patent No. 6551795  
; GENERAL INFORMATION:  
; APPLICANT: Marc J. Rubenfield et al.  
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS  
; FILE REFERENCE: 107196.136  
; CURRENT APPLICATION NUMBER: US/09/252.991A  
; CURRENT FILING DATE: 1999-02-18  
; PRIOR APPLICATION NUMBER: US 60/074,788  
; PRIOR FILING DATE: 1998-02-18  
; PRIOR APPLICATION NUMBER: US 60/094,190  
; PRIOR FILING DATE: 1998-07-27  
; NUMBER OF SEQ ID NOS: 33142  
; SEQ ID NO 27783  
; LENGTH: 524  
; TYPE: PRT  
; ORGANISM: Pseudomonas aeruginosa  
; NAME/KEY: UNSURE  
; LOCATION: (108)  
; OTHER INFORMATION: Identity of amino acid at the above locations are unknown.  
US-09-252-991A-27783

Query Match 26.3%; Score 457; DB 4; Length 524;  
Best Local Similarity 35.2%; Pred. No. 7.8e-43;  
Matches 116; Conservative 63; Mismatches 127; Indels 24; Gaps 8;  
QY 26 TPVLTSSILNQLTGRNLFKCELPQKTSFKIRGALNAVSLVPDALERKPKAVVTHSSG 85  
Db 41 TPLQPARQLSERLGNQVLLKREDLQPVFSFKIRGAYKNVAQLTE--EEKARGVIAASAG 97  
QY 86 NHGQALTYAAKLEGIPAYIVVPTAPDCKKLQAYCA-SIVYCEPDESRENVAKVTE 144  
Db 98 NHAQGLAAXRQGIKIRAVIVVPTKPTPEIKVQAVRAHGAHAKVLDGAPPEALAHAKLV-D 156  
QY 145 ETEGIMVHPNQPAPVIAAGTIALEVLNOVP-LVDALVVPVGGGMLAGTIAITVKALKPS 203  
Db 157 EKGVTFFVHPVDDPTIAGQGTAVAMEILRQPGRLDAIFVPVGGGLVAGIAAYVKYLRPE 216  
QY 204 VKVYAAPPSNADDCYQSKLGKMLPNLYPPETIADGVK-SSIGLNTWPIIRDLVDDIFTV 262  
Db 217 IKVIGVEPDES-NCLQAAAGERVVLGVGLFADGVAVAGIQHTFDICKDHVEVITV 275  
QY 263 TEDEIKATQQLWERMKLLIEPTAGVGAVALSOHFOFOTVSPVKNICIVLGGNVDL--- 319  
Db 276 STDEICAAIKDIYDDTTSITEPAGALAVAGI-KKYVERERAEGQTLVAIDSGANVNFDR 334  
QY 320 -----TSSITWVKQARPPASVQS 337  
Db 335 RHVAERAEGLERRRAIIAVTIPERPGSFKA 364

RESULT 6  
US-09-902-540-12639  
; Sequence 12639, Application US/09902540  
; Patent No. 6833447  
; GENERAL INFORMATION:  
; APPLICANT: Goldman, Barry S.  
; APPLICANT: Hinkle, Gregory J.  
; APPLICANT: Slater, Steven C.  
; APPLICANT: Wiegand, Roger C.  
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof  
; FILE REFERENCE: 38-10(15849)B  
; CURRENT APPLICATION NUMBER: US/09/902.540  
; CURRENT FILING DATE: 2001-07-10  
; PRIOR APPLICATION NUMBER: 60/217,883  
; PRIOR FILING DATE: 2000-07-10  
; NUMBER OF SEQ ID NOS: 16825

; SEQ ID NO 12639  
; LENGTH: 405  
; TYPE: PRT  
; ORGANISM: Myxococcus xanthus  
US-09-902-540-12639  
Query Match 25.6%; Score 445; DB 4; Length 405;  
Best Local Similarity 33.9%; Pred. No. 1.2e-41;  
Matches 107; Conservative 66; Mismatches 135; Indels 8; Gaps 6;  
QY 7 ISFADVEKAHINIRDSIHLTPVLTSSILNQLTG-RNLFKCELPQKTSFKIRGALNAVR 65  
Db 2 VTLEDIQARERLRSAIRPTPCQSDYYTERTTECAAVFFKLENLQRTGAFKRGALNKL 61  
QY 66 SLVPDALERKPKAVVTHSSNGHQALTYAAKLEGIPAYIVVPTAPDCK-KLQAYGAS 124  
Db 62 TLTED--ERR-RGVIAASAGNHAQGVAVHARRLGVSAITVMPERTPLIKVSRTRDDYGAR 118  
QY 125 IVYCEPDESRENVAKVTEETEGIMVHPNQPAPVIAAGTIALEVLNOVPVLDALVVPV 184  
Db 119 VILKGTNYDEAYABALRIQAEIRDVFIHPNDAHVIAAGTIGLELLEQCPDLEVLVLP 178  
QY 185 GGGMLAGIAITVKALKPSVKVYAAEPSNADDCYQSKLGKMLPNLYPPETIADGVK-SS 243  
Db 179 GGGGLISGIAKALKETPDIRVVGVOAETIASMKASVEAGERVLLAAGTTIADGIAVKR 238  
QY 244 IGLNTWPIIRDLVDDIFTVTDEIKATQQLWERMKLLIEPTAGVGAVALSOHFOFOTVSP 303  
Db 239 VGLTTFPMVQKYVDEVVAVDEEBIAAAILTLLEQKSVVEGAGAVGLAALLSG--DVPAA 296  
QY 304 EVKNICIVLGGNVDL 319  
Db 297 RGRRTAILLGGNIDM 312  
RESULT 7  
US-09-328-352-5207  
; Sequence 5207, Application US/09328352  
; Patent No. 6562958  
; GENERAL INFORMATION:  
; APPLICANT: Gary L. Breton et al.  
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER  
; FILE REFERENCE: GTC99-03PA  
; CURRENT APPLICATION NUMBER: US/09/328.352  
; CURRENT FILING DATE: 1999-06-04  
; NUMBER OF SEQ ID NOS: 8252  
; SEQ ID NO 5207  
; LENGTH: 411  
; TYPE: PRT  
; ORGANISM: Acinetobacter baumannii  
US-09-328-352-5207  
Query Match 25.6%; Score 443.5; DB 4; Length 411;  
Best Local Similarity 34.5%; Pred. No. 1.8e-41;  
Matches 112; Conservative 61; Mismatches 111; Indels 41; Gaps 9;  
QY 11 DVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFKCELPQKTSFKIRGALNAVRSLVPD 70  
Db 15 DIHAAERLDGLVVKTPFPVSEITISKTLGAKMWLKPENLQFTASFKERGALNKL 71  
QY 71 ALERKPKAVVTHSSNGHQALTYAAKLEGIPAYIVVPTAPDCKKLQAYGASIV---- 126  
Db 72 SEQEKQHGVIASAGNHAQGVAVHARRLGVSAITVMPERTPLIKVSRTRDDYGAR 131  
QY 127 -YCEPDESRENVAKVTEETEGIMVHPNQPAPVIAAGTIALEVLNOVPVLDALVVPV 185  
Db 132 DFSEAAAEH-----RVAQESLTIHPFDDBAIIAGQGTIALEMLEAVPDLDILVVP 186  
QY 186 GGGMLAGIAITVKALKPSVKVYAAE-----PSNADDCYQSKLGKMLPN-----LYPPETIA 237  
Db 187 GGGGLISGIAIAKTIKPKIKIIGVQSVVYPSMA-----KLLCNQYQLAVSMGSTVA 236

[illegible]

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RESULT 8
US-09-489-039A-14107
; Sequence 14107, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Breton et. al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.2004001
; CURRENT APPLICATION NUMBER: US/09/489, 039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 14107
; LENGTH: 334
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-14107

```

Query Match 25.5%; Score 442; DB 4; Length 334;  
Best Local Similarity 34.8%; Pred. No. 1.9e-41;  
Matches 115; Conserved 115; Conserved 115;

QY		7	ISFADVEKAHINRDSIHLTPVLTSSITNOLTGRLFFKCELFQKTGSKIRGALNAVR	66
Db	:	:	: : : : : :	
14	VSIDDILEAKORLAGIKYTKGRPSNFYSERCOGEIFLRFENWORTSGFKIRGA FNKL	CG	: : : : : :	73
QY		67	LVPDALEKPKAVVTHSSGNHGQALTAAKLEGIPAYIVVPOTAPDCKLAIQAYGASIV	128
Db	:	:	: : : : : :	
74	LT--AAEKR-KGVVACSAAGHAOGVLSLCMLIGIDGVMPKGAPKSVAATCDYSAEV	130	: : : : : :	
QY		127	YCESDSRESRENAKR--VTBETEGIMVHPNQBPVIAQGOTIALEVLNOPLVDALVVPV	184
Db	:	:	: : : : : :	
131	L--HGDNFNDTLAKASDIIVELEGRIPIFYDDPQVIAGQTIGLEILEDLYDVNDVNI	VP	: : : : : :	188
QY		185	GGGGLAGIAITVKALKPSKVYAAEPSNADDYCOSKKGLMPLNYPPETIADGVK-SS	243
Db	:	:	: : : : : :	
189	GGGGLTAGIAIAIKSINIPIRIIGVOSENVHGMMAASWTAGEITSRRH-AGTLADGC	VAR	: : : : : :	247
QY		244	IGLNTWPIIRDVVDDIFTYTEDEIKCATQLVWRMKLLIEPTAGVGVAAVLS-----Q	296
Db	:	:	: : : : : :	
248	PGKLTETEARQLVDDIVLVSEDDIRQSVMALIQRNKVITEGAGALACAALLSGKLD	SYIQ	: : : : : :	307
QY		297	HFOTVSPVEKNICVILSGGNVDLT--SSIT	324
Db	:	:	: : : : : :	
308	NKRTVS-----LIISGNDLSRSOIT	329	: : : : : :	

```

RESULT 9
US-09-252-991A-22442
; Sequence 22442, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27

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; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 22442
; LENGTH: 677
; TYPE: PRNT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-22442

```

Query Match	23.2%;	Score 403;	DB 4;	Length 677;
Best Local Similarity	33.5%;	Pred. No. 1.8e-36;		
Matches 111;	Conservative 60;	Mismatches 134;	Indels 26;	Gaps 9;
QY	26	TPVLTSSTILNLTGRNLFFKELCFQKTSFKIRGALNAVRSVLDPALERKPKAVVTHSSG	85	
Db	194	TLQVAPQLSQRNLGRNVLLKREDLPVPSFKIRGAYTRFAVL---	250	SDEQKARGVITASAG
QY	86	NHQQALTYAAALKEGIPAVIYVPQTPADCKKLAIQAYGASIVYCEPSDESRENVAKRV--TE	144	
Db	251	NHAQGLALAAQRLGVRVIVWPRTPPELKVKGVLARGEALL--HGDAFPDALAHALQLA	308	
QY	145	ETEGI-WYHFNQEPNAVITAGOTTIALEVLNQ-VPLVDALVVPVGGGMLAGIATVVKALKP	202	
Db	309	EREGTFFVPYDDPDVITAGOGTVAMELTRQHSGRLLDAIFVPVGGSLIAGIAAYVXHLRP	368	
QY	203	SVKYVAAEPSNADDCYQSLKGLMPLNLYPETIADGVK--SSIGLNTWPIIRDLVDIDFT	261	
Db	369	DIRVIGVEPEDS-NCLQALAAAGERVVLQGVGLFADGVAVAQIACNFVCCKDHVDEVIT	427	
QY	262	VTDEIKCATQLVWRMKLLIETAGVGVAAVLSSHFQTVSPVEKNICIVLGGNVDL---	319	
Db	428	VGSDEICAAITKDIYDDTRSITEPAGALAVAGI-KKVAERETEGOTLVAIDSGANINFR	486	
QY	320	-----TSSITWVKQAEPSYOS	337	
Db	487	LRHVAERAEELGEQREAILIATVVAERPGSFKA	517	

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RESULT 10
US-09-543-681A-4364
; Sequence 4364, Application US/09543681A
; Patent No. 6605709
; GENERAL INFORMATION:
; APPLICANT: GARY BRETON
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID S
; TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.1002-001
; CURRENT APPLICATION NUMBER: US/09/543,681A
; CURRENT FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/128,706
; PRIOR FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 8344
; SEQ ID NO 4364
; LENGTH: 525
; TYPE: PRT
; ORGANISM: Proteus mirabilis
US-09-543-681A-4364

```

Query Match	22.7%;	Score 193;	DB 4;	Length 525;
Best Local Similarity	33.0%;	Pred. No. 1.6e-35;		
Matches 104;	Conservative	67;	Mismatches 134;	Indels 10;
Gaps	7;			
QY	8	SPADVEKAHIN--IRDSIHLTPVLTSILNQLTGRNLPFKCELFQKTSFGSKIRGALNAVR	65	
Db	13	SSAEYLKAALGAPYEAAVTPDQEMAKISQRLLENTILVKREDRQFVHSFKLRGAYNMIA	72	
QY	66	SIAPDALERKPAVVTHSSGNHGQALTYAAKLEGIPAYITVPQTPADCKLAIQAYG-S	124	
Db	73	GLTP---EQKAGVVTASAGNHAQGVALSANRMGVKALIVMPIATADIKVDAVRFQGEA	129	
QY	125	IYVCEPSDESGRENVAKRVTETEETEGIMVHPNQSPAVIAGQQTALVELNQLVDALVPV	184	
Db	130	LLYGANFDEAKK-AIALAKEMGYTFVPPFDHPAVIAGQATLAWELLQQDVHLDRIFVPV	188	
QY	185	GGGGWLAGIAITVKKALKPSKVYAAEPSNADDCYOSKUGKMLPNLYPPTETIADGVK-SS	243	

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; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 8050
; LENGTH: 521
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-8050

Query Match 21.3%; Score 369; DB 4; Length 521;
Best Local Similarity 31.7%; Pred. No. 8.6e-33;
Matches 97; Conservative 64; Mismatches 129; Indels 16; Gaps 6;

QY 19 IRDSIHLTPVLTSSILNQLTGRNLFKFCELFQKTSFKIRGALNAVRSVPDALERKPKA 78
DB 32 VYEAQKTPLOKMDKLSRLDNVILVKREDQPVHFSKLRGAYAMMSSL---TAEQKSHG 88
QY 79 VVTHSSGNHGOALTAAKLEGIPAYIVVPTAPDCKKLAIOAYGASIVYCEPDESRENV 138
DB 89 VITASAGNHAQGVAFSASRLGVKALLVMPVATADIKVDVARGGEGVLLHGANFDEAKAR 148
QY 139 AKRVTETEIGIMVHPNQBPAVIAGQGTIALEVLNQLVPLVDALVVPVGGGMLAGIAITVK 198
DB 149 AIELAQOQGTFTVPPFDHPWVIAGQGTIALELLQDAHIDRVFVPGVGGGLAAGVAVLIK 208
QY 199 ALKPSVKVYAAEPSNADD--CYQSKLKGKMPNLYPPETIADGVK--SSIGLNTWPIIRD 255
DB 209 QLMPOIKVIAVE---AEDSACLKAALDAGHPVDLPRVGLFAEGVAVKRIQDETFRLCQY 265
QY 256 VDDIFTVTDEIKCATQLVWERMKLIEPTAGVGAAV---LSOHFTVSPVEKNICIVL 312
DB 266 LDDITVDSDAICAMKDLFEDVRAEFGSALALAGMKKYIAQH-----NIRGERLAHIL 321
QY 313 SGNVD 318
DB 322 SGANVN 327

RESULT 13
US-09-134-001C-3876
; Sequence 3876, Application US/09134001C
; Patent No. 6380370
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE REFERENCE: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: US/09/134,001C
; CURRENT FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5674
; SEQ ID NO 3876
; LENGTH: 424
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-3876

Query Match 21.2%; Score 367; DB 3; Length 424;
Best Local Similarity 31.1%; Pred. No. 1e-32;
Matches 100; Conservative 64; Mismatches 142; Indels 16; Gaps 8;

QY 7 ISFADVEKAHINIROSIHLTPVLTSSILNQLTGRNLFKFCELFQKTSFKIRGALNAVRS 66
DB 9 VSTKIDIEAYLRKLNIVKETPLQDFHYLSOKYCNVILKREDLQWRSFKLRGAYNAISV 68

; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 8050
; LENGTH: 521
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-8050

Query Match 21.3%; Score 369; DB 4; Length 521;
Best Local Similarity 31.7%; Pred. No. 8.6e-33;
Matches 97; Conservative 64; Mismatches 129; Indels 16; Gaps 6;

QY 19 IRDSIHLTPVLTSSILNQLTGRNLFKFCELFQKTSFKIRGALNAVRSVPDALERKPKA 78
DB 32 VYEAQKTPLOKMDKLSRLDNVILVKREDQPVHFSKLRGAYAMMSSL---TAEQKSHG 88
QY 79 VVTHSSGNHGOALTAAKLEGIPAYIVVPTAPDCKKLAIOAYGASIVYCEPDESRENV 138
DB 89 VITASAGNHAQGVAFSASRLGVKALLVMPVATADIKVDVARGGEGVLLHGANFDEAKAR 148
QY 139 AKRVTETEIGIMVHPNQBPAVIAGQGTIALEVLNQLVPLVDALVVPVGGGMLAGIAITVK 198
DB 149 AIELAQOQGTFTVPPFDHPWVIAGQGTIALELLQDAHIDRVFVPGVGGGLAAGVAVLIK 208
QY 199 ALKPSVKVYAAEPSNADD--CYQSKLKGKMPNLYPPETIADGVK--SSIGLNTWPIIRD 255
DB 209 QLMPOIKVIAVE---AEDSACLKAALDAGHPVDLPRVGLFAEGVAVKRIQDETFRLCQY 265
QY 256 VDDIFTVTDEIKCATQLVWERMKLIEPTAGVGAAV---LSOHFTVSPVEKNICIVL 312
DB 266 LDDITVDSDAICAMKDLFEDVRAEFGSALALAGMKKYIAQH-----NIRGERLAHIL 321
QY 313 SGNVD 318
DB 322 SGANVN 327

RESULT 13
US-09-134-001C-3876
; Sequence 3876, Application US/09134001C
; Patent No. 6380370
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE REFERENCE: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: US/09/134,001C
; CURRENT FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5674
; SEQ ID NO 3876
; LENGTH: 424
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-3876

Query Match 21.2%; Score 367; DB 3; Length 424;
Best Local Similarity 31.1%; Pred. No. 1e-32;
Matches 100; Conservative 64; Mismatches 142; Indels 16; Gaps 8;

QY 7 ISFADVEKAHINIROSIHLTPVLTSSILNQLTGRNLFKFCELFQKTSFKIRGALNAVRS 66
DB 9 VSTKIDIEAYLRKLNIVKETPLQDFHYLSOKYCNVILKREDLQWRSFKLRGAYNAISV 68

; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 8050
; LENGTH: 521
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-8050

Query Match 21.3%; Score 369; DB 4; Length 521;
Best Local Similarity 31.7%; Pred. No. 8.6e-33;
Matches 97; Conservative 64; Mismatches 129; Indels 16; Gaps 6;

QY 19 IRDSIHLTPVLTSSILNQLTGRNLFKFCELFQKTSFKIRGALNAVRSVPDALERKPKA 78
DB 32 VYEAQKTPLOKMDKLSRLDNVILVKREDQPVHFSKLRGAYAMMSSL---TAEQKSHG 88
QY 79 VVTHSSGNHGOALTAAKLEGIPAYIVVPTAPDCKKLAIOAYGASIVYCEPDESRENV 138
DB 89 VITASAGNHAQGVAFSASRLGVKALLVMPVATADIKVDVARGGEGVLLHGANFDEAKAR 148
QY 139 AKRVTETEIGIMVHPNQBPAVIAGQGTIALEVLNQLVPLVDALVVPVGGGMLAGIAITVK 198
DB 149 AIELAQOQGTFTVPPFDHPWVIAGQGTIALELLQDAHIDRVFVPGVGGGLAAGVAVLIK 208
QY 199 ALKPSVKVYAAEPSNADD--CYQSKLKGKMPNLYPPETIADGVK--SSIGLNTWPIIRD 255
DB 209 QLMPOIKVIAVE---AEDSACLKAALDAGHPVDLPRVGLFAEGVAVKRIQDETFRLCQY 265
QY 256 VDDIFTVTDEIKCATQLVWERMKLIEPTAGVGAAV---LSOHFTVSPVEKNICIVL 312
DB 266 LDDITVDSDAICAMKDLFEDVRAEFGSALALAGMKKYIAQH-----NIRGERLAHIL 321
QY 313 SGNVD 318
DB 322 SGANVN 327

RESULT 13
US-09-134-001C-3876
; Sequence 3876, Application US/09134001C
; Patent No. 6380370
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE REFERENCE: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: US/09/134,001C
; CURRENT FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5674
; SEQ ID NO 3876
; LENGTH: 424
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-3876

Query Match 21.2%; Score 367; DB 3; Length 424;
Best Local Similarity 31.1%; Pred. No. 1e-32;
Matches 100; Conservative 64; Mismatches 142; Indels 16; Gaps 8;

QY 7 ISFADVEKAHINIROSIHLTPVLTSSILNQLTGRNLFKFCELFQKTSFKIRGALNAVRS 66
DB 9 VSTKIDIEAYLRKLNIVKETPLQDFHYLSOKYCNVILKREDLQWRSFKLRGAYNAISV 68
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1	1735	100.0	340	9	US-09-789-300A-2	Sequence 2, Appli
2	1735	100.0	340	14	US-10-164-966-2	Sequence 2, Appli
3	1735	100.0	340	15	US-10-240-800-2	Sequence 2, Appli
4	1731	99.8	340	14	US-10-240-466-2	Sequence 2, Appli
5	1062.5	61.2	228	15	US-10-264-237-2089	Sequence 2089, Ap
6	774	44.6	339	16	US-10-437-563-108995	Sequence 108995,
7	755	43.5	379	15	US-10-425-114-49567	Sequence 49567, A
8	651	37.5	280	15	US-10-425-114-62761	Sequence 62761, A
9	590.5	34.0	247	15	US-10-424-599-155063	Sequence 155063,
10	516	29.7	252	16	US-10-767-701-43071	Sequence 43071, A
11	479.5	27.6	409	14	US-10-156-761-10839	Sequence 10839, A
12	457	26.3	329	15	US-10-413-943-33	Sequence 33, Appl
13	388.5	22.4	499	15	US-10-425-114-39197	Sequence 39197, A

Db 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHPNQEPVIAVGQGTIALEVLNQVPLVDAL 180  
QY 181 VVPVGGGMLAGIAITVKALKPSVKVYAAEPSNADDCYQSKLKGKLMNLYPPETIADGV 240  
Db 181 VVPVGGGMLAGIAITVKALKPSVKVYAAEPSNADDCYQSKLKGKLMNLYPPETIADGV 240  
QY 241 KSSIGLNTWPIIRDLDVDDIFTVTDEIKCATQLVWERMKLLIIEPTAGVGVAAVLSQHFOQT 300  
Db 241 KSSIGLNTWPIIRDLDVDDIFTVTDEIKCATQLVWERMKLLIIEPTAGVGVAAVLSQHFOQT 300  
QY 301 VSPEVKNICIVLGGNVDLTSSITWVKAERPASYQSVSV 340  
Db 301 VSPEVKNICIVLGGNVDLTSSITWVKAERPASYQSVSV 340

RESULT 2  
US-10-164-966-2  
; Sequence 2, Application US/10164966  
; Publication No. US20030064439A1  
; GENERAL INFORMATION:  
; APPLICANT: Bandaru, Rajasehkar  
; APPLICANT: Glucksmann, Maria Alexandra  
; APPLICANT: Meyers, Rachel E.  
; APPLICANT: Rudolph-Owen, Laura A.  
; TITLE OF INVENTION: Novel Nucleic Acid Sequences Encoding Melanoma  
; TITLE OF INVENTION: Associated Antigen Molecules, Aminotransferase  
; TITLE OF INVENTION: Molecules, ATPase Molecules, Acyltransferase Molecules,  
; TITLE OF INVENTION: Pyridoxal-Phosphate Dependant Enzyme Molecules and Uses  
; FILE REFERENCE: 35800/247400  
; CURRENT APPLICATION NUMBER: US/10/164,966  
; CURRENT FILING DATE: 2002-06-07  
; PRIOR FILING DATE: 2001-12-27  
; PRIOR FILING DATE: 2001-12-27  
; PRIOR FILING DATE: 2000-12-28  
; PRIOR FILING DATE: 2000-12-28  
; PRIOR FILING DATE: 2001-11-28  
; PRIOR FILING DATE: 2001-11-28  
; PRIOR FILING DATE: 2000-11-30  
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; PRIOR FILING DATE: 2000-11-29  
; PRIOR FILING DATE: 2000-11-20  
; PRIOR FILING DATE: 2000-11-20  
; PRIOR FILING DATE: 2001-07-19  
; PRIOR FILING DATE: 2001-07-19  
; PRIOR FILING DATE: 2000-07-20  
; PRIOR FILING DATE: 2000-07-20  
; PRIOR FILING DATE: 2001-06-22  
; PRIOR FILING DATE: 2000-06-26  
; PRIOR FILING DATE: 2000-06-26  
; PRIOR FILING DATE: 2001-02-20  
; PRIOR FILING DATE: 2001-02-20  
; PRIOR FILING DATE: 2000-02-17  
; NUMBER OF SEQ ID NOS: 43  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 2  
; LENGTH: 340  
; TYPE: PRT  
; ORGANISM: Homo sapiens

US-10-164-966-2  
Query Match 100.0%; Score 1735; DB 14; Length 340;  
Best Local Similarity 100.0%; Pred. No. 2.4e-162;  
Matches 340; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
US-10-164-966-2

QY 1 MCAQYCISFADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLPFKCELFOKTSFKIRGA 60  
Db 1 MCAQYCISFADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLPFKCELFOKTSFKIRGA 60  
QY 61 LNAVRSILVPDALKERKPAVVVTHSSGNHGQALTYAAKLEGIPAVIVVPTAPDCKKLAIOA 120  
Db 61 LNAVRSILVPDALKERKPAVVVTHSSGNHGQALTYAAKLEGIPAVIVVPTAPDCKKLAIOA 120  
QY 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHPNQEPVIAVGQGTIALEVLNQVPLVDAL 180  
Db 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHPNQEPVIAVGQGTIALEVLNQVPLVDAL 180  
QY 181 VVPVGGGMLAGIAITVKALKPSVKVYAAEPSNADDCYQSKLKGKLMNLYPPETIADGV 240  
Db 181 VVPVGGGMLAGIAITVKALKPSVKVYAAEPSNADDCYQSKLKGKLMNLYPPETIADGV 240  
QY 241 KSSIGLNTWPIIRDLDVDDIFTVTDEIKCATQLVWERMKLLIIEPTAGVGVAAVLSQHFOQT 300  
Db 241 KSSIGLNTWPIIRDLDVDDIFTVTDEIKCATQLVWERMKLLIIEPTAGVGVAAVLSQHFOQT 300  
QY 301 VSPEVKNICIVLGGNVDLTSSITWVKAERPASYQSVSV 340  
Db 301 VSPEVKNICIVLGGNVDLTSSITWVKAERPASYQSVSV 340

RESULT 3  
US-10-240-800-2  
; Sequence 2, Application US/10240800  
; Publication No. US20030212262A1  
; GENERAL INFORMATION:  
; APPLICANT: Merck & Co., Inc.  
; TITLE OF INVENTION: HUMAN SERINE RACEMASE  
; FILE REFERENCE: 20642Y-PCT  
; CURRENT APPLICATION NUMBER: US/10/240,800  
; PRIOR FILING DATE: 2002-10-03  
; PRIOR FILING DATE: 2002-10-03  
; PRIOR FILING DATE: 2000-04-04  
; PRIOR FILING DATE: 2000-04-04  
; NUMBER OF SEQ ID NOS: 8  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 2  
; LENGTH: 340  
; TYPE: PRT  
; ORGANISM: Homo Sapien  
US-10-240-800-2  
Query Match 100.0%; Score 1735; DB 15; Length 340;  
Best Local Similarity 100.0%; Pred. No. 2.4e-162;  
Matches 340; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
US-10-240-800-2

QY 1 MCAQYCISFADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLPFKCELFOKTSFKIRGA 60  
Db 1 MCAQYCISFADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLPFKCELFOKTSFKIRGA 60  
QY 61 LNAVRSILVPDALKERKPAVVVTHSSGNHGQALTYAAKLEGIPAVIVVPTAPDCKKLAIOA 120  
Db 61 LNAVRSILVPDALKERKPAVVVTHSSGNHGQALTYAAKLEGIPAVIVVPTAPDCKKLAIOA 120  
QY 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHPNQEPVIAVGQGTIALEVLNQVPLVDAL 180  
Db 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHPNQEPVIAVGQGTIALEVLNQVPLVDAL 180  
QY 181 VVPVGGGMLAGIAITVKALKPSVKVYAAEPSNADDCYQSKLKGKLMNLYPPETIADGV 240  
Db 181 VVPVGGGMLAGIAITVKALKPSVKVYAAEPSNADDCYQSKLKGKLMNLYPPETIADGV 240  
QY 241 KSSIGLNTWPIIRDLDVDDIFTVTDEIKCATQLVWERMKLLIIEPTAGVGVAAVLSQHFOQT 300  
Db 241 KSSIGLNTWPIIRDLDVDDIFTVTDEIKCATQLVWERMKLLIIEPTAGVGVAAVLSQHFOQT 300  
QY 301 VSPEVKNICIVLGGNVDLTSSITWVKAERPASYQSVSV 340  
Db 301 VSPEVKNICIVLGGNVDLTSSITWVKAERPASYQSVSV 340



Db 77 FALDDD---EASKGVVTHSSGNHAAVALAAKLGIPAYIVIPRNAPACKVDNVKRYGCH 133  
QY 125 IYCEPDSRENKVRVTEETEGIMVHPNOEPVIAAGOTYIALEVLNOVPLVDALVVPV 184  
Db 134 IWSDVSIRESKVRVQVETGAILVHPFNNTTISGQOTVSLLELEVPDIIVPI 193  
QY 185 GGGMLAGIAITVKALPSPVKKVAAEPSNADDCVQSKLKGKLMPLNYPETIADGVKSSI 244  
Db 194 SGGGLISGVALAAKAINPSIRILAAEPKGDADSQAQSKAAGKII-TLPSTNTIADGLRAFL 252  
QY 245 GLNTWPIIRDLDVDDIFVTTEDEIKCATOLVWERMKLLIETPTAGVGVAAVLVSOHQFTVSP- 303  
Db 253 GDLTPVVRDLVDVDDIIVDDNALVDMKCMYELKVAVEPSGAIGLAALSDPEKQSSAW 312  
QY 304 -EVKNICIVLSSGNVDLTSSITW 325  
Db 313 HESSKIGIIVSGGNVDL--GVILW 333

## RESULT 7

US-10-425-114-49567  
; Sequence 49567, Application US/10425114  
; Publication No. US20040034888A1  
; GENERAL INFORMATION:  
; APPLICANT: Liu, Jingdong  
; APPLICANT: Zhou, Yihua  
; APPLICANT: Kovalic, David K.  
; APPLICANT: Screen, Steven E.  
; APPLICANT: Tabaska, Jack E.  
; APPLICANT: Cao, Yongwei  
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with  
; FILE REFERENCE: 38-21(5313)B  
; CURRENT APPLICATION NUMBER: US/10/425,114  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 73128  
; SEQ ID NO 49567  
; LENGTH: 379  
; TYPE: PRT  
; ORGANISM: Zea mays  
; FEATURE:  
; OTHER INFORMATION: Clone ID: 700335017\_FLI.pep  
US-10-425-114-49567

Query Match 43.5%; Score 755; DB 15; Length 379;  
Best Local Similarity 46.1%; Pred. No. 1.6e-65;  
Matches 146; Conservative 66; Mismatches 99; Indels 6; Gaps 3;

QY 5 YCISFADVEKAHINIRDSIHLPVLTSSILNLTGRNLFKCELFOKTSFKIRGALNAV 64  
Db 57 YAADTDSIREAQARIAPYVHRTVWMSSTSIDAMVKKLFFKCECFQKAGAFKIRGASNI 116  
QY 65 RSLVPDALERKPKAVVTHSSGNHQAALTYAAKLEGIPAYIVIPQTPADCKKLAIOAGAS 124  
Db 117 FALDD---EQVSKGVVTHSSGNHAAVALAAKLGIPAHIVIPRNAPACKVENVKRYGCH 173  
QY 125 IYCEPDSRENKVRVTEETEGIMVHPNOEPVIAAGOTYIALEVLNOVPLVDALVVPV 184  
Db 174 IWSDVSIRESKVRVQVETGAILVHPFNNTTISGQOTVSLLELEVPDIIVPI 233  
QY 185 GGGMLAGIAITVKALPSPVKKVAAEPSNADDCVQSKLKGKLMPLNYPETIADGVKSSI 244  
Db 234 SGGGLISGVALAAKAINPSIRILAAEPKGDADSQAQSKAAGKII-TLPSTNTIADGLRAFL 292  
QY 245 GLNTWPIIRDLDVDDIFVTTEDEIKCATOLVWERMKLLIETPTAGVGVAAVLVSOHQFTVSP- 303  
Db 293 GDLTPVVRDLVDVDDIIVDDNALVDMKCMYELKVAVEPSGAIGLAALSDPEKQSSAW 352  
QY 304 -EVKNICIVLSSGNVDL 319  
Db 353 HESSKIGIIVSGGNVDL 369

## RESULT 8

US-10-425-114-62761  
; Sequence 62761, Application US/10425114  
; Publication No. US20040034888A1  
; GENERAL INFORMATION:  
; APPLICANT: Liu, Jingdong  
; APPLICANT: Zhou, Yihua  
; APPLICANT: Kovalic, David K.  
; APPLICANT: Screen, Steven E.  
; APPLICANT: Tabaska, Jack E.  
; APPLICANT: Cao, Yongwei  
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with  
; FILE REFERENCE: 38-21(5313)B  
; CURRENT APPLICATION NUMBER: US/10/425,114  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 73128  
; SEQ ID NO 62761  
; LENGTH: 280  
; TYPE: PRT  
; ORGANISM: Zea mays  
; FEATURE:  
; OTHER INFORMATION: Clone ID: LIB3591-097-G1\_FLI.pep  
US-10-425-114-62761

Query Match 37.5%; Score 651; DB 15; Length 280;  
Best Local Similarity 47.6%; Pred. No. 1.9e-55;  
Matches 128; Conservative 56; Mismatches 79; Indels 6; Gaps 3;

QY 53 GSFKIRGALNAVRSIVPDLERKPKAVVTHSSGNHQAALTYAAKLGIPAYIVIPQTPAD 112  
Db 6 GAFKIRGASNISFALDD---EQVSKGVVTHSSGNHAAVALAAKLGIPAHIVIPRNAPA 62  
QY 113 CKKLAIOAGASIVYCEPDSRENKVRVTEETEGIMVHPNOEPVIAAGOTYIALEVLN 172  
Db 63 CKVENVKRYGCHIIWSDASIESREYCKRVQETGAVLIHPFNFSKYTISGQOTVSLLE 122  
QY 173 QVPLVDALVVPVGGGMLAGIAITVKALPSPVKKVAAEPSNADDCVQSKLKGKLMPLNYP 232  
Db 123 QVPEIDIIVIPISGGGLISGVALAAKAINPSIRILAAEPKGDADSQAQSKAAGKII-TLPS 181  
QY 233 PETIADGVKSSIGLNTWPIIRDLDVDDIFVTTEDEIKCATOLVWERMKLLIETPTAGVGVAA 292  
Db 182 TNTIADGLRAFLGDLTPVVRDLVDVDDIIVDDNALVDMKCMYELKVAVEPSGAIGLAA 241  
QY 293 VLSHQFTVSP--EVKNICIVLSSGNVDL 319  
Db 242 ALSDEFKQSSAWHSSKIGIIVSGGNVDL 270

## RESULT 9

US-10-424-599-155063  
; Sequence 155063, Application US/10424599  
; Publication No. US20040031072A1  
; GENERAL INFORMATION:  
; APPLICANT: La Rosa, Thomas J.  
; APPLICANT: Kovalic, David K.  
; APPLICANT: Zhou Yihua  
; APPLICANT: Cao Yongwei  
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated with  
; FILE REFERENCE: 38-21(53223)B  
; CURRENT APPLICATION NUMBER: US/10/424,599  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 285684  
; SEQ ID NO 155063  
; LENGTH: 247  
; TYPE: PRT  
; ORGANISM: Glycine max  
; FEATURE:  
; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_111043C.1.pap  
US-10-424-599-155063







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; NUMBER OF SEQ ID NOS: 69
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 29
; LENGTH: 576
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-10-413-943-29

Query Match      22.3%; Score 387.5; DB 15; Length 576;
Best Local Similarity 33.9%; Pred. No. 5.7e-29;
Matches 105; Conservative 59; Mismatches 131; Indels 15; Gaps 10;

QY 18 NIRDSTHLTPVLTSIIQLTGRNLFQKTSFKIRGALNAVRSIVPDLERKPK 77
Db 71 SVYDVINESPISOGVGLSSRLNTNVILKREDLLPVFSFKURGAYNMIAKL--DDSORN-Q 127

QY 78 AVVTHSSGNHGQALTYAAKLEGIPAVIVPQTAPDCKKLAIQAYGASIV-YCEPSPDESRE 136
Db 128 GVIACSGAGNHAQGVAFPAKHLKIPATIVMPVCTPSIKYQNVSRSLGSQVVLVYGNDFDEAKA 187

QY 137 NVAKRVTETEETEGIMVHPNQEPVAVIAGGTIALVNLQVPL---VDALVVPVGGGMLAGI 193
Db 188 ECAK-LAEERGLTNIPPFDPHPYVIAQGTIVAMEILRQVRTANKIGAVFVPVGGGLIAGI 246

QY 194 AITVKALKPSVKVYAAEPSNADDCYOSKLGKLMPLNLYPPETIADGVK-SSIGLNTWPII 252
Db 247 GAYLKRVPAPHIKTIGVETYDAATLHNSLORNQRTPLPVVVGTFADGTSVRMIGEETFRVA 305

QY 253 RDLVDDIFTVTEDEIKCATOLVWRMKLLIETPTAGVGVAAVLSQHFQTVSPV---KNIC 309
Db 306 QQVWDEVVLVNTDEICAAVKDIEFTRTSIVEPSGALSVAG-MKKYISTVHPHIDHTKNTY 364

QY 310 I-VLSCGNVD 318
Db 365 VPILSGANNW 374
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